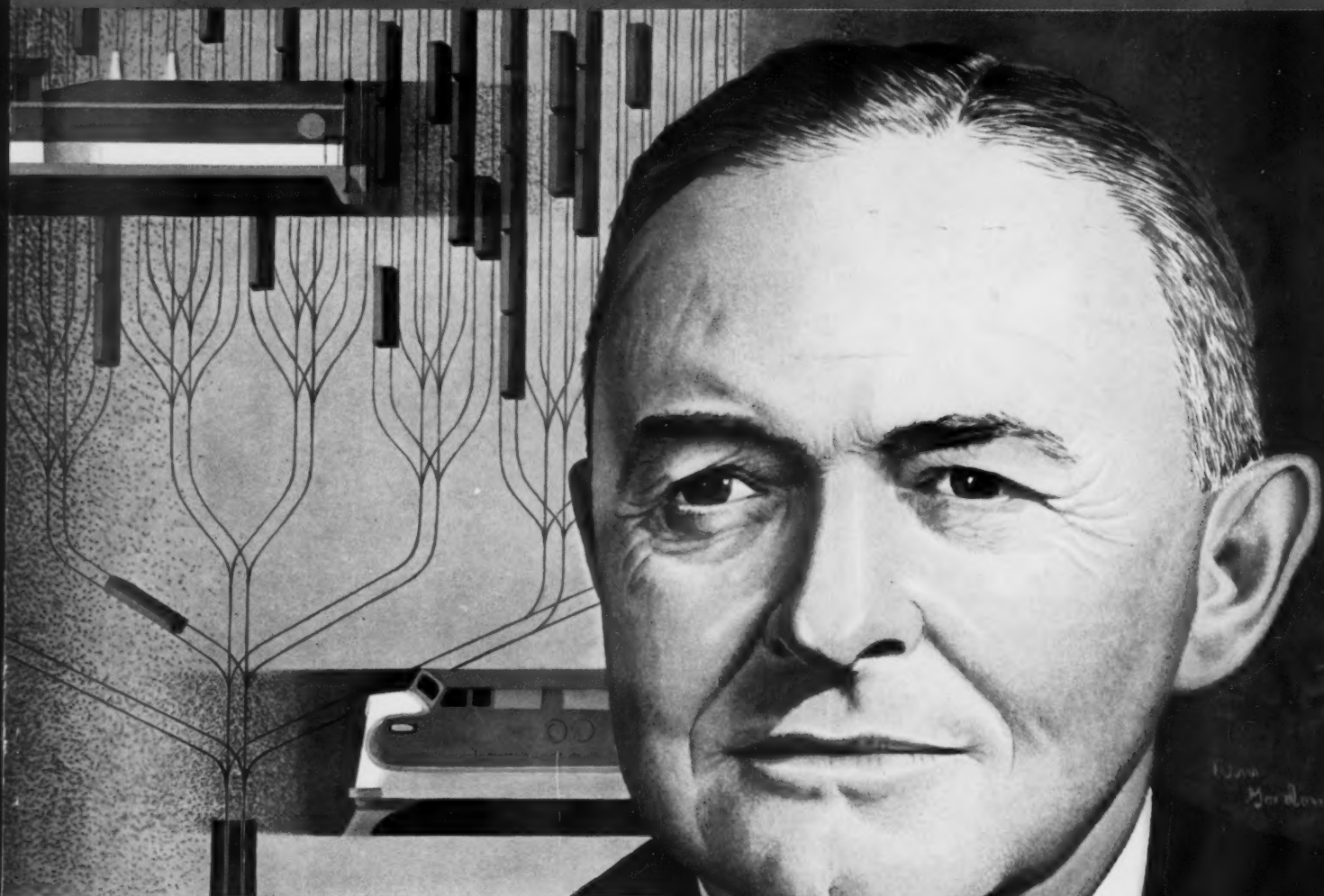


Perfection
Is Safety Men's Goal—p. 9

Motion Weighing in Flat Yards . . . p. 32

RAILWAY AGE

APRIL 15, 1957 • THE INDUSTRY'S NEWSWEEKLY



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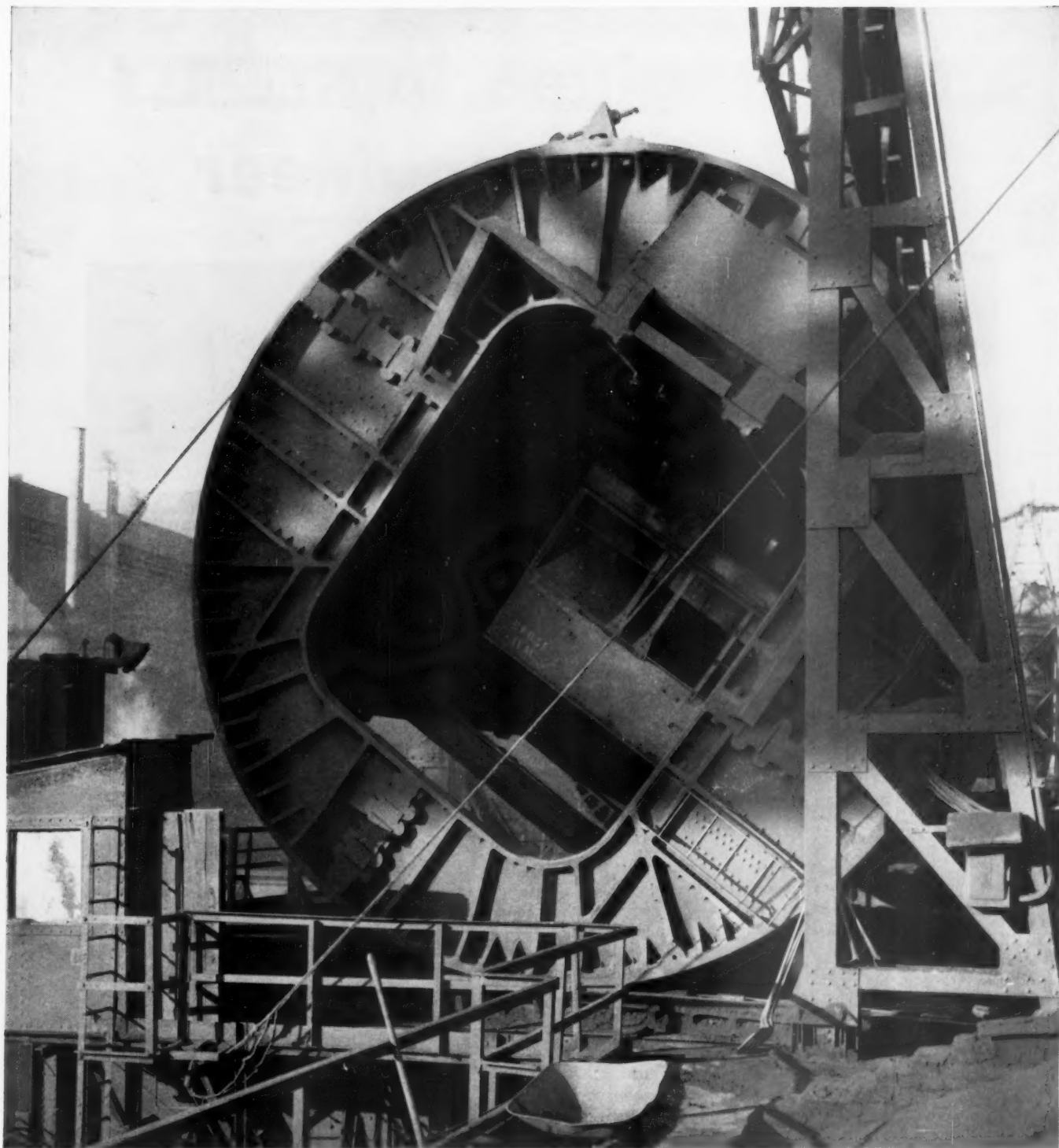
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RAILWAY AGE The Industry's Newsweekly

Vol. 142, No. 15

April 15, 1957

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CONTENTS and Week at a Glance

Safety men aim for perfection p. 9

Training, teamwork and "teeth" in the rules are the essentials of employee accident-prevention campaigns that pay off.

Roadway grants reserved minerals p.10

The U.S. Supreme Court has ruled that the federal government retained mineral rights to lands granted the Union Pacific for its right-of-way. The ruling does not apply to other land conveyed to railroads by the land-grant statutes.

Why not motion weighing in flat yards? p.32

The technique has proved successful in gravity yards over a period of years. Now, says an engineering consultant, electronic scales in flat yards would also save time. He points out that a cut of 15-20 cars could be weighed in motion in about five minutes.

How to cut down on down time p.33

A program aimed at getting maximum use from high-speed office equipment where it's needed most has been developed by the New York Central. The program stems from the fact that unless the modern devices are kept busy, their idleness might offset economies they otherwise make possible.

Hydraulic squeeze 'licks' car recoil p.35

With two years of successful road tests completed, the Southern Pacific will construct 350 new hydra-cushion under-frame box cars. According to SP spokesmen, the new under-frame reduces the jar of cars meeting at 10 mph to a velvety four-mile-per-hour coupling.

Passenger stations go modern p.36

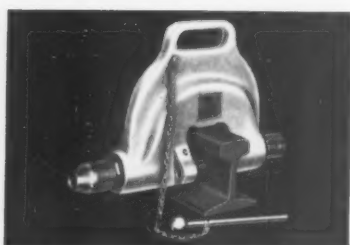
Convenience and utility are the keynotes of new structures recently completed by the Great Northern, at Edmonds, Wash., and by the Missouri Pacific at Palestine, Tex.

'Reversal for the better' on the North Western .. p.38

The C&NW lost \$5.5 million last year, but the new manage-



SETS NEW RECORDS IN RAIL LAYING



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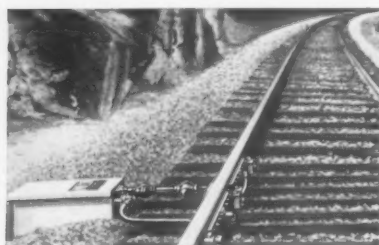
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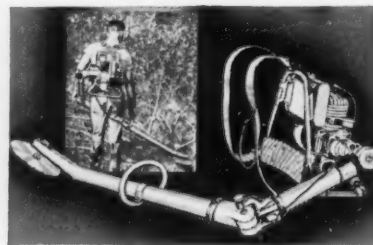
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RAILWAY AGE The Industry's Newsweekly

Current Statistics

Operating revenues, two months	
1957	\$1,671,027,680
1956	1,646,576,830
Operating expenses, two months	
1957	\$1,331,918,282
1956	1,303,060,291
Taxes, two months	
1957	\$171,149,268
1956	169,385,229
Net railway operating income, two months	
1957	\$124,000,444
1956	129,924,058
Net income estimated, two months	
1957	\$91,000,000
1956	95,000,000
Average price 20 railroad stocks	
April 9, 1957	90.20
April 10, 1956	104.13
Carloadings revenue freight	
Thirteen weeks, 1957	8,627,475
Thirteen weeks, 1956	8,980,203
Average daily freight car surplus	
Wk. ended Apr. 6, 1957 ..	7,603
Wk. ended Apr. 7, 1956 ..	3,580
Average daily freight car shortage	
Wk. ended Apr. 6, 1957 ..	1,297
Wk. ended Apr. 7, 1956 ..	5,087
Freight cars on order	
March 1, 1957	111,965
March 1, 1956	141,437
Freight cars delivered	
Two months, 1957	15,477
Two months, 1956	9,080
Average number railroad employees	
Mid-February 1957	988,664
Mid-February 1956	1,041,458

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Week at a Glance CONTINUED

ment—headed by Ben W. Heineman—is optimistic about the future. Some time this year, says Mr. Heineman, the road will find itself operating in the black.

Railroad critics should take a rest p.46

The list of railroad accomplishments of the past few years adds up to an exhibit which will compare favorably with the accomplishments of the management of any other industry. Critics of the railroads should ease off now and then to look at the things about the industry which deserve praise and emulation.

SHORT AND SIGNIFICANT

Special meeting of the AAR . . .

board of directors was slated for April 12 in Washington to consider the equipment situation. The special session followed only two weeks after the latest regular meeting, held March 29. Reports in financial circles as this issue went to press indicated the meeting would include discussion of possible plans for large additions to the freight-car fleet.

Three-way merger plans . . .

of the Erie, Lackawanna and Delaware & Hudson got a boost last week. A preliminary survey of general proposals produced a "green light" report. Directors of the three roads promptly authorized a more detailed study of problems and potentials.

Railroads spent nearly \$2 billion . . .

in 1956 for fuel, materials and supplies, excluding equipment. The actual total was \$1,883,848,000, but inflation played a major role. Of the \$247 million increase above 1955, higher prices accounted for approximately \$112 million, while \$135 million represented increases in quantities purchased.

The Southern has no TOFC . . .

plans at the moment, says the road's annual report. "It has not yet been determined that any of the various [piggyback] proposals would represent an economical and profitable operation over the company's lines at the present," the report added. Nevertheless, the road will continue its TOFC studies.



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1957 Golden Anniversary Year

Safety Men Aim for Perfection

Harriman Award-winning roads attribute achievements to earnest programs which involve management and labor in efforts to cut accident ratios

The three "E's" of railroad employee safety are Education, Enforcement and Enthusiasm. They get priority on railroads whose accident-prevention programs are rated tops—the Harriman Award winners.

How important safety is to a railroad's operational health can only be suggested by the intensity with which these companies attack practices, attitudes and property hazards which cause—or could cause—mishaps. Ten of last year's Harriman Award winners responded to a Railway Age survey of safety practices—within reasonable limits it would be appropriate to state that the cost of accident prevention was a minor consideration with each of them.

All, in one way or another, paraphrased a Western Maryland statement that "savings accruing from the safety program defy approximation because of the many intangibles involved and because of the fact that safety is placed ahead of monetary values."

F. J. Voss, president of the Duluth, Missabe & Iron Range, stated that "I would estimate an annual saving to our company of several hundred thousand dollars" as a result of safety activities.

How big the job is that still must be done is indicated by the accompanying table from the ICC's latest accident summary—covering all of 1956. The total number of train-service accidents went up by almost 500 last year, compared with 1955, the ICC reports. While total fatalities in such accidents went down, three more trainmen were killed (98) in 1956 than in the previous year.

Chief emphasis in most programs is on education, with stress on frequent safety meetings and training sessions, considerable use of films, and widespread distribution of posters to keep personnel safety-conscious.

Enthusiasm, representing cooperative spirit working both ways between management and labor, is vital to all successful campaigns. Its importance is emphasized by ACL President C. M. Davis who holds that "the will to win must per-

meate the entire organization and the efforts stimulated must be channeled properly through effective leadership."

"Teeth" in the programs is held to be virtually indispensable, particularly in safe operations but also in such things as the wearing of safety goggles. On the Pennsylvania, the policy is that "individual employee cooperation with the safety program is one of the prerequisites for promotion. . . . Furthermore, compliance with safety rules is mandatory for continued employment."

The ACL deliberately set out to win its Harriman gold medal last year, indicating the effectiveness of a concerted safety effort. In the infancy of ACL safety work, from 1921 to 1930, the road averaged 21 fatal injuries a year, but, with development of a more intense program, the average was cut to 7 per year in the 1947-1956 span.

A similar report comes from J. P. Koloc, manager of safety, Illinois Cen-

tral. The accident ratio on the IC, he said, was 28.01 per million man hours in 1923 but was brought down to 4.67 in 1956—a drop of 83%.

Applying the 1923 ratio to 1956 operations, Mr. Koloc estimated that "there would have been 1,823 total casualties last year instead of 304" had not the IC's efforts been effective.

Similarly, Richmond, Fredericksburg & Potomac President W. T. Rice reports that the 1933-1941 ratio was 19.19 (984 reportable injuries). From 1942 to 1945 the ratio soared to 33.4 (1,307 injuries) but fell back to 16.63 (648 injuries) from 1946 to 1949.

Mr. Rice said that each department used to follow its own safety policies. In 1952, however, a safety department was set up and immediately showed results. RF&P's 1950-1952 ratio was 10.75 (199 injuries) and dropped to 6.12 (110) in the 1953-1955 period. With a goal of "perfection in safety," RF&P has its sights

12-Month Summary of Train-Service Accidents

		Employees on Duty					
		Total		Trainmen		Other Employees	
		Killed—Injured		Killed—Injured		Killed—Injured	
Coupling or uncoupling cars or locomotives	1956	5	457	5	454	0	3
	1955	6	480	6	476	0	4
Coupling or uncoupling air hose	1956	5	274	1	247	4	27
	1955	4	276	2	238	2	38
Operating locomotives	1956	1	404	1	394	0	10
	1955	5	507	5	495	0	12
Operating hand brakes	1956	5	871	5	863	0	8
	1955	6	797	6	793	0	4
Operating switches	1956	1	517	1	498	0	19
	1955	1	524	0	500	1	24
Coming in contact with fixed structures	1956	6	155	6	148	0	7
	1955	7	128	7	127	0	1
Getting on or off cars or locomotives	1956	8	2,863	5	2,784	3	79
	1955	6	2,637	6	2,565	0	72
Struck or run over (not at public crossings)	1956	50	153	23	97	27	56
	1955	66	160	25	86	41	74
Miscellaneous	1956	64	4,697	51	3,981	13	716
	1955	58	4,385	38	3,710	20	675
TOTAL	1956	145	10,391	98	9,466	47	925
	1955	159	9,894	95	8,990	64	904

on a 3.0 ratio as a "practical objective," and, when that is attained, will aim at 2.5.

President W. C. Beaman, who's shooting at making the Texas Mexican "the safest railroad in the United States," reports these striking results:

"From an employee casualty rate per million man hours in 1948 of 20.39, and an average of 14.79 for the eight years 1941 to 1948," Mr. Beaman said, "the ratio dropped to 2.07 in 1949. Our average casualty ratio for the eight years ending with 1956 was 1.55."

How do these roads do it? Is there a secret formula others could borrow?

Not according to R. E. Baker, general manager of Portland Terminal. "After many tries and an equal number of failures," he related, the road recognized there is no "short cut guarantee recipe." A plan was developed "gradually," starting with the idea that it's management's job "to provide a safe place to work" and that "to be effective, the safety program must have proper support and guidance from the top."

Beyond that, Mr. Baker holds, management, supervisor and worker share responsibility.

One of the most novel training methods is the Texas Mexican's use of 3-D slides to compare right and wrong work habits.

A carefully worked out program gets the credit from President R. I. Huyler for the Lehigh & Hudson River's success. Details include representation of all departments at

monthly staff safety meetings; regular on-the-job safety sessions; extensive use of motion pictures, and periodic rallies to pass on information and boost morale.

Added to that is an intensive accident investigation technique designed to learn *how it happened, who was to blame and how to keep it from happening again.*

A comparable program is in operation on the DM&IR. Mr. Voss reports that this road, like the L&HR, makes ample use of safety meetings, suggestions, posters, rallies, films, schools and literature. But it also emphasizes involvement and acceptance of responsibility by management, good housekeeping and proper care of tools, and enforcement of safety rules.

Competitive instincts are also aroused on several roads. F. W. Okie, president of the Bessemer & Lake Erie, said his road has set up achievement contests among the four operating departments with trophies as prizes. Foremen also are rewarded when no-lost-time accidents occur in their departments for varying periods. Individuals who go a year without lost time because of accidents participate in drawings for \$100 bonds.

The Western Maryland also spurs on its employees by publishing safety records of seven connecting carriers, a scheme similar to that in which the PRR compares the records of its nine regions.

Responsibility for safety programs usually finds its way directly to the

president's office where great interest is universally apparent.

The IC, in addition to its manager of safety (Mr. Koloc), charges each superintendent with safety responsibility on his division. Each division has a safety committee for local supervision, while two safety inspectors assist Mr. Koloc in roving supervision, conducting field programs and maintaining records.

Topping all of this is a general safety committee organized in 1953 and comprised of Mr. Koloc, the personnel director, general manager, engineer maintenance of way, general superintendent motive power, manager stores, chief claim agent, assistant comptroller and suggestion system manager.

The DM&IR, on the other hand, has a superintendent of safety and welfare who reports directly to the president on a par with all other department heads.

The Pennsylvania has a system manager of safety who reports to the vice-president, personnel, while the ACL has a director of safety aided by a superintendent of safety and three field supervisors, all working through 98 separate safety committees.

The WM appointed its first full-time safety officer in 1933 but this position is largely an advisory and organizational one, as responsibility "rests with the officer in charge of each department and the supervisors and other employees therein," according to G. M. Leilich, vice-president, operations.

Roadway Grants Reserved Minerals

U.S. Supreme Court says government retained rights to subsoil deposits—Granted lands off right-of-way not involved

The United States Supreme Court has ruled that the federal government retained mineral rights to lands granted the Union Pacific for its right-of-way. The ruling applies to right-of-way lands only—not to the vast areas of other lands conveyed to railroads by the land-grant statutes.

The decision was embodied in a 5-to-3 opinion announced by Justice Douglas. Justice Frankfurter filed a dissenting opinion to which Justices Burton and Harlan subscribed. Justice Whittaker did not participate.

The case involved an action brought by the federal government to enjoin the UP from drilling for oil and gas on the right-of-way granted to it by the land-grant act of July 1, 1862. The government lost in the lower courts and appealed.

The right-of-way was granted by section 2 of the 1862 act which made no reference to a reservation of mineral rights. Section 3 granted non-right-of-way lands, and provided that "all mineral lands shall be excepted from the operation of this act." The Supreme Court majority interpreted the latter as making the exception applicable to the right-of-way grants.

It does not apply to other granted lands because the statute provided that mineral lands among them would be reserved by administrative determination. And patents were not issued to land determined to constitute mineral lands. Minerals subsequently found on the patented land belong to the railroads.

As to the right-of-way, the court held in effect that Congress there, too,

intended to reserve mineral lands, that administrative determination was "obviously inappropriate," and that the only practical way was to retain the mineral rights. "The right-of-way certainly could not be expected to take all the detours that might be necessary were it to avoid all lands containing minerals," the court said.

It also said its determination that "mineral lands" included "mineral resources under the right-of-way" was "wholly in keeping with the federal policy that prevailed in 1862."

The dissenting opinion held that the mineral-reservation provisions of the 1862 act did not apply to the section which granted the right-of-way lands. Justice Frankfurter said:

"The court cannot in 1957 retrieve what Congress granted in 1862. The hindsight that reveals the act as lavish or even profligate ought not to influence the court to narrow the scope of the 1862 act by reading it in the light

of a policy that did not mature until a half century thereafter."

Reaction to the decision from western roads with oil interests was restrained and cautious.

The Union Pacific itself, losing party to the suit, took the ruling in stride. "Little or no effect" would be had on UP's present oil activity, a spokesman said. He explained that the road had drilled no wells on rights of way and was only exploring the possibility of doing so when the suit was instituted.

Missouri Pacific officials wanted time to study the decision before reacting for the record, but didn't seem alarmed at possible effect on MP Texas oil operations.

The decision's effect, "if any,"

would be slight on Santa Fe's oil interests. At present, the road has no wells on rights of way.

Frisco people felt it "too early" to comment, but didn't see how the decision could affect present operations. Southern Pacific spokesmen wanted to read the decision before commenting, but said it "could apply only to a small part of our oil and gas lease operations." They added that all SP land grant oil and gas production is in California.

Great Northern and Milwaukee officers weren't worried, explaining that their roads had no land-grant rights of way in oil-producing country.

Northern Pacific oil development—"not based on rights of way but outright ownership"—won't be affect-

ed. The NP also had planned little or no drilling on rights of way in the future.

The Burlington expects "virtually no effect." A "Q" attorney pointed out that his road holds no right of way granted under the 1862 act of Congress on which the court based its ruling.

The North Western is involved in litigation in Wyoming over mineral rights of way. A lower court decision has forbidden lease of the road's right of way for oil development.

However, the road may appeal—since the decision was based on Wyoming statute and the Supreme Court decision is "not necessarily conclusive" on the point.

Passenger Deficit Probe Has Broad Scope

Setting case for hearing June 18, ICC calls for evidence on 15 phases of problem—Also proposes to revise expense-separation rule

The Interstate Commerce Commission has set its passenger-deficit investigation for hearing and designated 15 phases of the problem on which it wants studies made and evidence presented. The hearing will open June 18 in Washington before Examiner George B. Vandiver and a cooperating committee of state commissioners.

The commission also has served notice that it has under consideration the matter of revising its rules for the separation of operating expenses between freight and passenger services. The notice said particular attention would be given to the bases for distributing those expenses which are not directly related to either of the services.

This rule-making proceeding (No. 32141) was instituted so that revision of the rules will be considered with the record made in the deficit inquiry, which is No. 31954. Interested parties have until May 15 to file, in writing, their suggestions for modifying the separation rules.

The 15 matters designated as subjects for the deficit inquiry are the same as those submitted by the commission for consideration at the prehearing conference held last year (Railway Age, Aug. 6, 1956, p. 11). The June hearing will be devoted to four of them as follows:

- The effect of suburban development and the private automobile on the passenger deficit.

- Studies of the political and economic forces exerted upon railroads to maintain commutation service and

of the corresponding obligation of the public with respect to such service.

- An analysis of the experience of the carriers in discontinuing trains and in the abandonment of lines, stations and agencies.

- Studies of what railroad management has done and plans to do to improve equipment and services and the effect thereof on volume of passenger traffic.

Exhibits and testimony prepared by the railroads are to be served on other interested parties not later than 20 days before the hearing. Those par-

ties, who entered appearances at the prehearing conference, include state regulatory agencies, railroad labor organizations, associations of users of passenger service, shippers, and the commission's Bureau of Inquiry and Compliance.

The other 11 designated subjects are these:

- Historical development of the Commission's present rules governing separation of operating expenses between freight and passenger-train service; investigation of "direct charges" and allocation of common expenses required by such rules; whether, and in what manner and extent, such rules should be changed.

- A cost study to determine what part of the passenger deficit is attributable to the various kinds of passenger-train service. (To be furnished by carriers.)

- A survey of the number of trains operated and the number of passengers carried on each train during a representative period. (To be furnished by carriers.)

- A review of the present and past rate structures to determine what has been the effect on gross and net passenger train revenue of any changed rate levels—either increased or decreased.

- Determination of factors which affect the rate structures of airlines and buslines which are advantageous to these carriers, as contrasted with the rail passenger rate structure.

- An overall determination of the factors, other than rate levels, which tend to make passenger-train operations profitable or unprofitable, in relation to motor bus and air passenger operations.

- Study of the extent, amount and



20th Birthday Cake

Southern Pacific's Coast "Daylight" service—between Los Angeles and San Francisco—observed its 20th birthday late last month. Buford Green, "Daylight" attendant, cuts the anniversary cake.



'Slumbercoach' Sleeps Its 10,000th Passenger

Mrs. Beatrice Carlson of Chicago was the 10,000th "Slumbercoach" passenger since the Burlington inaugurated the service last October 28. Mrs. Carlson is shown with

J. J. Alms, "Q" general passenger traffic manager, who presented her with a memento of the occasion as she boarded the "Denver Zephyr" in Chicago's Union Station.

effect of federal, state and local taxation on passenger-train service equipment, and facilities.

- Cost of constructing, maintaining and operating railroad passenger terminal facilities and the influence thereof on the passenger-train service deficit.

- The extent and competitive effect of: (a) Direct and indirect federal, state, and local aid. (b) Govern-

mental policies with respect to passenger and headend traffic.

- Railroad passenger train service and facilities in relation to the needs of the commerce of the U.S., the postal service, and the national defense.

- A study of equipment depreciation schedules in relation to obsolescence and modernization of passenger train equipment.

Langdon Explains RR 'Shall Nots' Stand

Railroads think the "shall-nots" rate-freedom program could not be applied equitably if it extended to rates of carriers of the same type as well as to rates of competitors operating different types of transport.

This view was expressed by Jervis Langdon, Jr., general counsel of the Baltimore & Ohio, at recent hearings before the Subcommittee on Transportation and Communications of the House Committee on Interstate and Foreign Commerce. Mr. Langdon appeared for the Association of American Railroads in support of bills (H.R.5523 and H.R.5524) proposing to amend the Interstate Commerce Act by adding the original version of the "shall nots."

The original version was designed to end the Interstate Commerce Commission's "fair-share-of-the-traffic" approach by prohibiting consideration of the effect of proposed rates on an-

other mode of transportation. The subcommittee also has under consideration the new version embodied in the Eisenhower Administration's latest bill to implement recommendations of the President's Cabinet Committee on Transport Policy (Railway Age, Mar. 11, p. 11).

The new version proposes to apply the "shall-nots" intra-agency as well as inter-agency. Louis S. Rothschild, undersecretary of commerce for transportation, took the position that the Commerce Department had not changed the Cabinet Committee recommendation. He said application on the intra-agency basis was "inherent" in the original proposal.

He was questioned at some length by Representative Harris, Democrat of Arkansas, chairman of the subcommittee and its parent committee. The questioning brought out the fact that the new version was not framed until

June 1956—more than a year after bills with the original version were introduced in Congress.

Chairman Harris' view was that the new version is not the recommendation of the Cabinet Committee. He asked Mr. Rothschild to supply any evidence the Commerce Department had to support the view that the recommendation has not been changed.

Mr. Langdon's contention that the "shall-nots" could not be applied equitably on the intra-agency plan was based on the different regulatory set-ups. He pointed out that the railroads are completely regulated while much truck and water transportation is exempt.

He also noted that competition within the railroad industry is already "intense." He went on to say that railroads are already subject to destructive competition from other agencies, and the "shall nots" would merely allow them to meet it, subject to restrictions.

As to trucker opposition, Mr. Langdon said its basis was clear—"every cost comparison shows that the rails have the low cost beyond short hauls." He conceded that there might be some casualties among uneconomic truck operators.

Chairman Harris remarked that this would be in line with the objective of letting each agency "find its proper place." The difficulty, he added, is to determine what is the proper place.

Alco Will Consolidate Its Locomotive Facilities

Alco Products, Inc., has offered for immediate sale or lease about one-third of the buildings comprising its Schenectady, N.Y., plant.

The offer is the first step in a plan to consolidate and modernize the company's locomotive-building facilities, said Perry T. Egbert, president. Alco, he added, is planning to rebuild its present "west-side" plant into one of the most modern and efficient locomotive manufacturing facilities in the country, although details are not yet complete.

Aircoach Group Sues Railroads for \$45 Million

Forty-two major railroads were charged with illegally monopolizing the commercial transportation of military personnel in a \$45 million, triple-damage anti-trust suit filed last week by the Aircoach Transport Association. The suit was filed in the United States District Court in New York. (Continued on page 14)

MARKET OUTLOOK THIS WEEK

Carloadings Drop 7.3% in Week

Loadings of revenue freight in the week ended April 6 totaled 644,092 cars, the Association of American Railroads announced on April 11. This was a decrease of 50,830 cars, or 7.3%, compared with the previous week; a decrease of 41,286 cars, or 6.0%, compared with the corresponding week last year; and a decrease of 15,125 cars, or 2.3%, compared with the equivalent 1955 week.

Loadings of revenue freight for the week ended March 30 totaled 694,922 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS			
For the week ended Saturday, March 30			
District	1957	1956	1955
Eastern	120,853	124,581	119,915
Alleghany	142,812	147,621	132,533
Pocahontas	65,411	61,097	50,979
Southern	127,548	138,192	108,127
Northwestern ..	76,162	74,982	74,071
Central Western ..	111,319	120,365	112,670
Southwestern ..	50,817	58,130	56,466
Total Western Districts	238,298	253,477	243,207
Total All Roads	694,922	724,968	654,761
Commodities:			
Grain and grain products	51,869	50,206	41,427
Livestock	5,590	6,876	7,091
Coal	142,383	139,869	102,131
Coke	12,953	13,024	10,662
Forest Products ..	40,713	47,065	41,660
Ore	22,838	23,516	16,694
Merchandise l.c.l. ..	57,968	62,241	61,726
Miscellaneous ..	360,608	382,171	373,370
March 30	694,922	724,968	654,761
March 23	685,833	697,248	634,628
March 16	689,226	685,983	650,924
March 9	672,386	697,601	662,283
March 2	703,984	710,976	653,575
Cumulative total, 13 weeks	8,627,475	8,980,203	8,316,710

New Equipment

► *Canadian Pacific*.—Appropriated \$43,893,705 for 1957 purchase of 4,325 freight cars, and \$32,238,323 for purchase of 157 diesel locomotive units, says N. R. Crump, CPR president, in road's recently released annual report.

FREIGHT-TRAIN CARS

► *Champ Carry 'Bullish' on Freight Car Building*.—Commenting on Western Maryland President Grotz's statement that railroads need \$10 billion in rolling stock in next decade, Champ Carry, president of Pullman, Inc., said demand "could be a lot less than that and business would still be good . . . I am very bullish on the future of the freight car building business but do not have the same feeling about passenger car business." He said interchangeability of passenger equipment (not possible with Pullman-Standard "Train X" types), may determine trends in future passenger-car designs.

► *Cotton Belt*.—Ordered 50 70-ton gondola cars, Bethlehem Steel, at estimated cost of \$450,250, for delivery next January, and 100 70-ton covered hopper cars, Pullman-Standard, at estimated cost of \$953,500, for delivery in October.

► *Florida East Coast*.—Plans to purchase, subject to court order, 150 70-ton gondola cars, Magor; 50 70-ton open-top hopper cars, ACF Industries; and 55 70-ton covered hopper cars, Pullman-Standard; approximate cost \$2,105,000; gondola cars would be delivered in first quarter of 1958, and both types of hopper cars in fourth quarter of 1957.

► *General American*.—Has set aside exclusive track for building "Airlide" covered hopper cars in its East Chicago, Ind., shops; track will be kept in operation on permanent basis starting with sixth production run—calling for about 1,200 cars—to begin next January 1.

► *Great Northern*.—Ordered 150 70-ton covered hopper cars, Pullman-Standard; cost, \$1,500,000; delivery expected first quarter 1958.

► *Union Pacific*.—Ordered 100 70-ton "Airlide" covered hopper cars, General American.

► *Wabash*.—Ordered 100 70-ton gondola cars, Bethlehem Steel, for delivery next January, and 50 70-ton covered hopper cars, Greenville Steel Car, for delivery next June.

New Facilities

► *Louisville & Nashville*.—Ordered equipment for new electronically controlled retarder classification yard at Birmingham, Ala.; equipment, known as Velac automatic classification yard system, includes programmed switching system with automatic switching and retarder controls, manufactured by Union Switch & Signal division of WAB Co.

(Continued from page 12)

States District Court for the District of Columbia.

The pleadings asked for an injunction against what they called "cut-throat" rate practices and other alleged actions of the railroads. It was alleged that railroad rate practices in 1956 caused members of the association to lose \$1.6 million in Army business alone.

BRT Accepts 'Package' Settlement

Nearly six months of negotiation, mediation and emergency fact-finding came to an end when the Brotherhood of Railroad Trainmen accepted a "package" settlement calling for a 26½-cents-an-hour increase over a three-year period.

Unions representing more than 80% of U.S. rail employees had previously settled for essentially the same wage-and-hour benefits.

The new BRT agreement provides for a first-year wage increase of 12½¢ an hour, effective last November 1. Second- and third-year increases of 7¢ an hour each are to go into effect November 1, 1957, and November 1, 1958.

Yard workers are granted the option of receiving seven paid holidays a year, beginning November 1, 1957, or November 1, 1958, or on the first of the years following. If the option is exercised effective November 1,

The complainant is a trade association and sales agent for air carriers which bid on plane-load charter transportation. It has 30 members with a combined fleet of 67 planes.

Named in the suit along with the 42 railroads are the Western Military Bureau and the Trunk Line Central Passenger Committee of the Traffic Executive Association—Eastern Railroads.

1957, second- and third-year increases will be five cents an hour instead of seven. If the option is exercised on November 1, 1958, or after, the third-year increase will be only three cents an hour.

The cost-of-living clause follows the pattern of those in earlier contracts. A cent an hour, increase or decrease, is allowable for each half-point change in the consumer price index, base of which is to be 117.1. Adjustments are to be made every six months, beginning May 1.

The new agreement also prohibits further negotiated increases or decreases until November 1, 1959.

The negotiations recently ended began at Chicago last September 5, with the BRT demanding a three-dollar-a-day wage increase and paid holidays. Mediation board sessions began October 3, and the emergency fact-finding board was created December 22.

Commissioners Urge Truck Law Reform

How strongly the ICC is backing legislation aimed at curbing "pseudo private" truckers has been indicated by two of its members.

Chairman Owen Clarke, addressing the Western Highway Institute April 9 at Phoenix, Ariz., declared that "we want to clean up the mess created by the masqueraders, to end the shady purchase and sale agreement, and to eliminate improper trip leases."

He emphasized that the ICC has no intention of regulating legitimate private carriers but is after only the operator "who is actually rendering a common carrier service or at least is depriving our essential common carriers of necessary traffic."

Commissioner R. L. Murphy told the Southern Association of Railroad and Utility Commissioners at Biloxi April 4 that the commission wants to wipe out "buy and sell" practices. He said proposed amendment of the Motor Carrier Act "is intended only to control those engaging in trans-

portation services as a subterfuge."

Both commissioners also defended the ICC proposals to limit agricultural commodity exemptions. Mr. Clarke said the "gradual siphoning off" of choice traffic is harmful to railroad and truck common carriers alike.

He said frozen food manufacturers recognize the need for reforms in face of the operations of the "fly-by-night operators now infesting" the transport field.

Mr. Murphy said that recent court decisions which broadened the exemptions have prompted the ICC's proposals. He said the court decisions are going much farther than was contemplated by Congress.

"Principal purpose of enacting these exemptions was to benefit the producers of such commodities, primarily farmers. They are now being used," Mr. Murphy asserted, "by commercial interests for their own advantage without any provable benefit to the farmer or producer."

PRR Operations Will Remain on Standard Time

The Pennsylvania has advised the Interstate Commerce Commission that it will retain its operating timetables on Standard Time. The road had previously said it would operate on Daylight Saving Time during the period such time is in effect.

After that announcement was made, Commission Chairman Owen Clarke wrote PRR President J. M. Symes, calling attention to the Standard Time Act which provides that railroad operations be on that basis. Mr. Symes' reply said the shift would not be made, and added that the road was still interested in promoting uniformity and thus ending the present confusion.

Meanwhile, a bill, S.1769, has been introduced in the Senate "to require common carriers to give passenger service information in daylight saving time." Its sponsor is Senator Smathers, Democrat of Florida.

February Net Was Down \$1,000,000

Class I railroads in February had an estimated net income, after inter-



Spreading the Good Word

Officers of the new Railroad Community Committee of the Mahoning and Shenango Valleys as they met recently to plan the group's activities. The committee's headquarters are in Youngstown, Ohio. Left to right are R. W. Lemon (vice-chairman), division freight sales manager, New York Central; F. J. Mulligan (chairman), superintendent, Mahoning division, Erie; and V. F. Green (secretary), assistant general passenger agent, Erie.

est and rentals, of \$47 million, compared with \$48 million in February 1956, according to the Bureau of Railway Economics of the Association of American Railroads.

Since January's net was off \$3 million, the two-months' figure was down \$4 million—\$91 million compared with \$95 million.

February's net railway operating income, before interest and rentals, was \$65,734,214, compared with \$67,047,928 in February 1956. The two-months' net railway operating income was \$124,000,444, compared with \$129,924,058.

Twenty-nine Class I roads failed to earn interest and rentals in this year's first two months. Rate of return for the 12 months ended with February averaged 3.92%, compared with 4.2% for the previous 12 months.

CLASS I RAILROADS—UNITED STATES

	Month of February	
	1957	1956
Total operating revenues	\$ 815,462,206	\$ 814,618,567
Total operating expenses	643,339,479	641,393,912
Operating ratio—per cent	78.89	78.74
Taxes	84,423,267	84,113,345
Net railway operating income (Earnings before charges)	65,734,214	67,047,928
Net income, after charges (estimated)	47,000,000	48,000,000
Two Months ended February		
Total operating revenues	\$1,671,027,680	\$1,646,576,830
Total operating expenses	1,331,918,282	1,303,060,291
Operating ratio—per cent	79.71	79.14
Taxes	171,149,268	169,385,229
Net railway operating income (Earnings before charges)	124,000,444	129,924,058
Net income, after charges (estimated)	91,000,000	95,000,000

North Western Opposes LS&I Trackage Petition

The North Western last week was opposing the Lake Superior & Ishpeming's plans to acquire half interest in 30 miles of Soo Line track leading to the site of a proposed LS&I ore dock. The North Western objection was introduced in ICC hearings on the LS&I petition.

Soo Line trackage involved is from Eben Junction, Mich., to Rapid River. By acquiring joint ownership the LS&I would facilitate access to a planned \$10-million dock at Sterling Harbor (Railway Age, Dec. 24/31, 1956, p. 8).

In Chicago, a North Western spokesman said his road opposes the LS&I plan because its own docks at (Continued on page 39)

Railroading



After Hours with

Jim Lyne

VERSATILE RAILROADER—The other evening I ran into Loyd Kiernan, retired executive vice-president of the B&M, and learned that he has been directing the recent railroad course (upwards of 70 students) at American University in Washington. Loyd is an alumnus of the Illinois Central, the Equitable Life Assurance Society, and the AAR's public relations department. Having a command of Spanish, he has recently been in demand for various government assignments to Spanish-language countries.

MORE ABOUT "DOPE"—Southworth Lancaster of Boston University recalls a train of perishables on which the traffic department requested that a car repairer ride "with brasses and dope," in the event of bearing trouble. The general superintendent replied that he would take care of the train all right, but, for the information of the traffic department, "we do not use dope in the operating department."

Nevertheless, "dope" is a good word. As John Mitros of the Illinois Central Magazine advises, the term comes from the Dutch word "doop," meaning sauce (or gravy?). It is a term used for soupy material in other places than on the railroads.

Mr. Mitros also says that caboose comes from "kabuse," an old Low German word. Its use in the U.S., with present spelling, to mean something like a shack, was common, he says, as long ago as the early 1800's.

MAKING COACH TRAVEL ATTRACTIVE—Edward V. Grosvenor, chairman of the Railroads Tariff Research Group, is a confirmed and enthusiastic coach traveler. He reports that his family shares his preference because (1)

they believe it's more fun, (2) they sleep comfortably in coach seats, (3) they'd rather eat sandwiches at their seats than have to line up for the dining car.

EVG says some railroad men hold coach service in low esteem—and he agrees that it can be pretty uncomfortable, but insists that, when the effort is made to make it attractive, it is very attractive indeed. I'm sure he's got something there—because, basically, a seat in a modern coach has it all over a first class seat on a plane; and look how people flock to the planes.

As for me, it'll take a lot of argument to persuade me that a coach can be more attractive than a Pullman bed for an over-night ride. But Pullman and coach are not fundamentally competitive with each other. Pullman's primary common-carrier competition (I'd suppose) is first-class plane travel, while coaches compete with buses and air-coach. And the private auto is the big rival of them all. The drive-yourself car, plus comfortable coaches and Pullmans, seems to offer the best answer to the attractions of private motoring.

SMOOTH CHANGEOVER—The operating and other officers of the Erie and Lackawanna—in charge of the terminal merger of the two roads in their New Jersey commuter service on March 25—are still getting praise from the customers for the smoothness of the change-over. The job was complicated two days after its inception by a strike on the Hudson & Manhattan—which many passengers normally use for the Hudson river crossing—but the added burden on the ferry service was taken on without a hitch. Passengers were fully advised in advance of the changes—the Erie (which had to do most of the changing) issuing a 12-page folder.

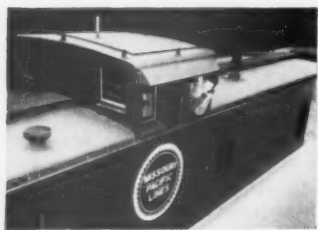
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Questions and Answers

Of current interest to the Transportation Department

What does consignees' failure to remove dunnage from cars mean to the railroads in terms of lost car days? And has there been any recent noticeable improvement in patron's cleaning of cars after the load has been removed . . .

?

[In the April 1 column, an answer to this question from a Seaboard representative stated that the situation generally had not improved. Here are three respondents who say things are getting better.—G.C.R.]

CONDUCTED by G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this column runs in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York 7.

Yes. Clean car program is getting results.

V. P. Sohn, general superintendent transportation of the Milwaukee, states that over the last five years shipper cooperation in cleaning cars has improved. Nevertheless, he says, on the average about 20% of cars released in any given terminal must be switched to the cleaning track. Four to five days per car, depending upon the terminal, then are lost. Cars released from industries are in better shape than those unloaded on team tracks. These team track cars generally are unloaded by contract truckers "who make no effort to clean cars after they are unloaded." Mr. Sohn notes that the railroad has no way of forcing the trucker to clean these cars. He says, however, that the consignee is the one who might be able to persuade the trucker to clean the car.

In conjunction with AAR forces, Milwaukee personnel check cars being released by industries. When an offending industry is spotted officials of both operating and traffic departments of the Milwaukee call on the offender. They explain how patrons' cleaning helps alleviate car shortages. Later on the same patron is checked again, and frequently the situation is found to have improved.

The Great Northern's general superintendent transportation, A. W. Campbell says that road's clean car campaigns at various terminals have been successful. Much of the credit he gives to the National Clean Car Committee's program as carried out by the car efficiency committees of the local shippers' advisory boards. Still, about 15% of all cars released by consignees must go to the cleaning tracks. But the unclean car percentage varies from terminal to terminal, "with some places showing . . . as low as 10%, and others as high as 30%." At the smaller terminals two car-days are lost when the railroad must clean the car. In larger cities average car-days lost goes up to three. Weekends

sometimes mean an additional lost day.

Mr. Campbell's opinion is that industries unloading on their own tracks are 15-20% better at complete unloading than are team track receivers. He suggests that since complete unloading is a voluntary action of the receiver, the railroads' only hope is to carry on the clean car program as vigorously as possible through the shippers' advisory boards.

From the Southwest comes word that while there has been no "favorable revolution" in patrons' complete unloading activities, there has been some improvement. Authority for this statement is the Frisco's vice-president—operations, R. J. Stone. However, "continued education through the shippers' advisory boards eventually will cause shippers and receivers to understand their obligation to release clean cars," Mr. Stone continued.

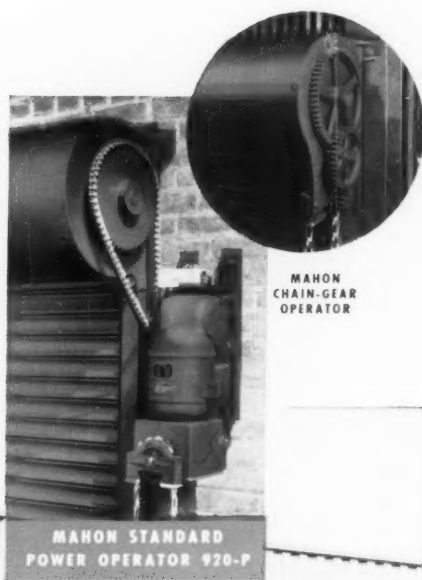
At Springfield, Mo., from November 12-18, 1956, the Frisco found it necessary to send to the cleaning track 10.6% of all cars released "empty." At other points on the railroad, Mr. Stone says, the situation probably is a little worse. Each one of these cars to be cleaned is out of service for approximately three days.

The Frisco's experience is that receivers who have their own tracks are as guilty of leaving cars dirty as are those who take delivery on team tracks. Thus the Frisco's findings are different from those of the GN, Milwaukee and Seaboard.

Mr. Stone favors continuing the clean car campaigns through the advisory boards. He suggests, however, that the railroad "continue to invite shippers and consignees to view first hand the existing problems. Perhaps railroad members of local traffic clubs, chamber of commerce groups and other civic organizations could help educate fellow members . . . on the problem of dunnage removal."

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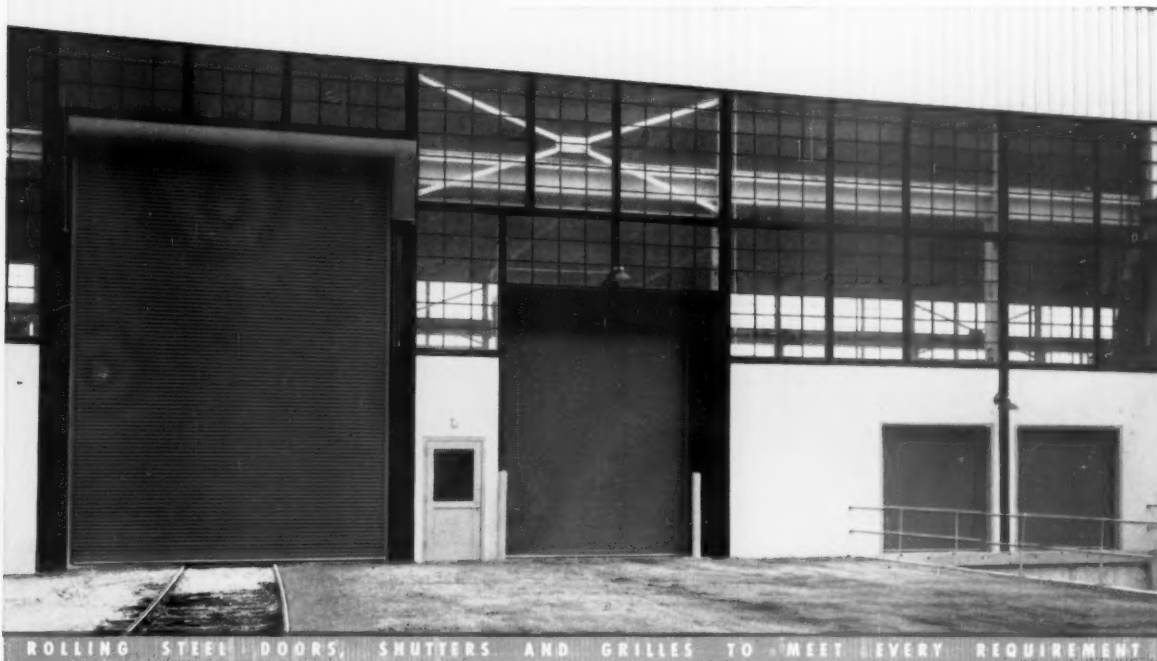


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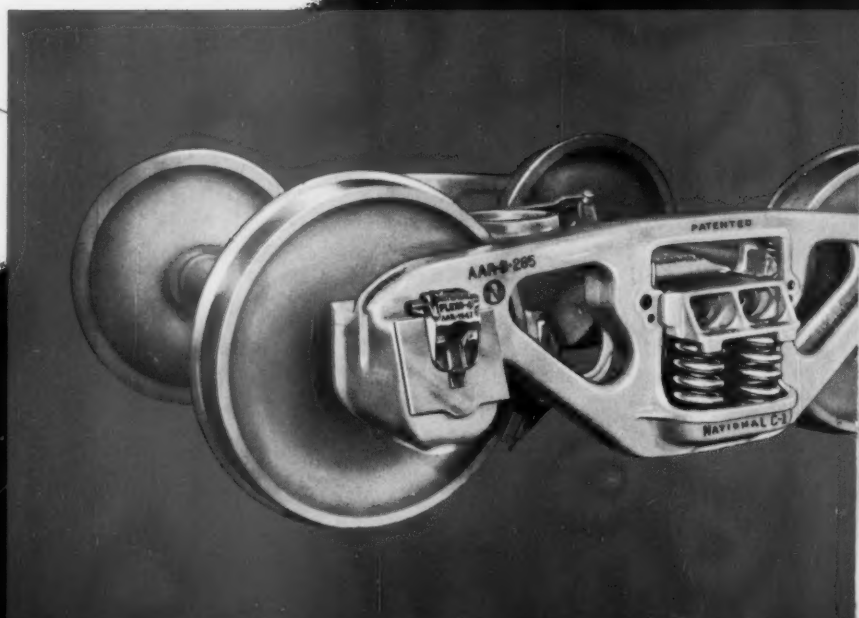


Mahon Power Operated Rolling Steel Doors installed in a railroad opening, a truck opening, and two loading dock openings in a new building for Samuel G. Keywell Co., Inc., Detroit, Michigan. Campbell Engineering Co., Designers. H. F. Campbell Construction Co., General Contractors.

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The sun never sets on National C-1 trucks. They are used by major railroads in many countries because C-1 Trucks provide a s-m-o-o-t-h, friction-controlled ride that results in lower maintenance for cars and trucks.

Heart of the C-1 friction-control mechanism is the wedge. Actual service records prove that C-1 wedges are still in top condition . . . even after travelling the equivalent of eight times around the world.



NATIONAL MALLEABLE and STEEL CASTINGS COMPANY

Railway Division Headquarters
Cleveland 6, Ohio

International Division Headquarters
Cleveland 6, Ohio

Established
1868

Canadian Subsidiary: National Malleable and Steel Castings Company of Canada, Ltd., Toronto 1, Ontario
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NEW POWER...NEW LIFE...NEW "LOOK" FOR YOUR OLD STEAM WRECKER...

With L. B. Smith Diesel Conversion

The 29-year-old Long Island locomotive wrecking crane shown above has just been completely modernized in our shops. Conversion from steam to Diesel has added years of service, increased efficiency and reduced operating costs on this 150 ton Brownhoist.

Conversion included plenty of power in a GM Diesel with Twin Disc torque converter. Clutches are air-operated by a Westinghouse compressor. The new "Look" benefits the operator, for he now has a complete view of his work from the cab which has been relocated in a right front position. All controls have been

placed in the same arrangement with which he is familiar.

This is one of some 50 cranes modernized by L. B. Smith personnel. With a major portion of our large plant facilities devoted to the repair of cranes, shovels and heavy equipment, we make every possible effort to keep the quality of our work equal to the reputation we have earned over the years.

If your Dieselization program includes the conversion of wrecking cranes, you will undoubtedly benefit from discussing it with us.

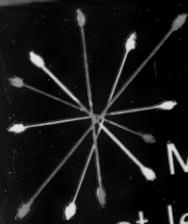
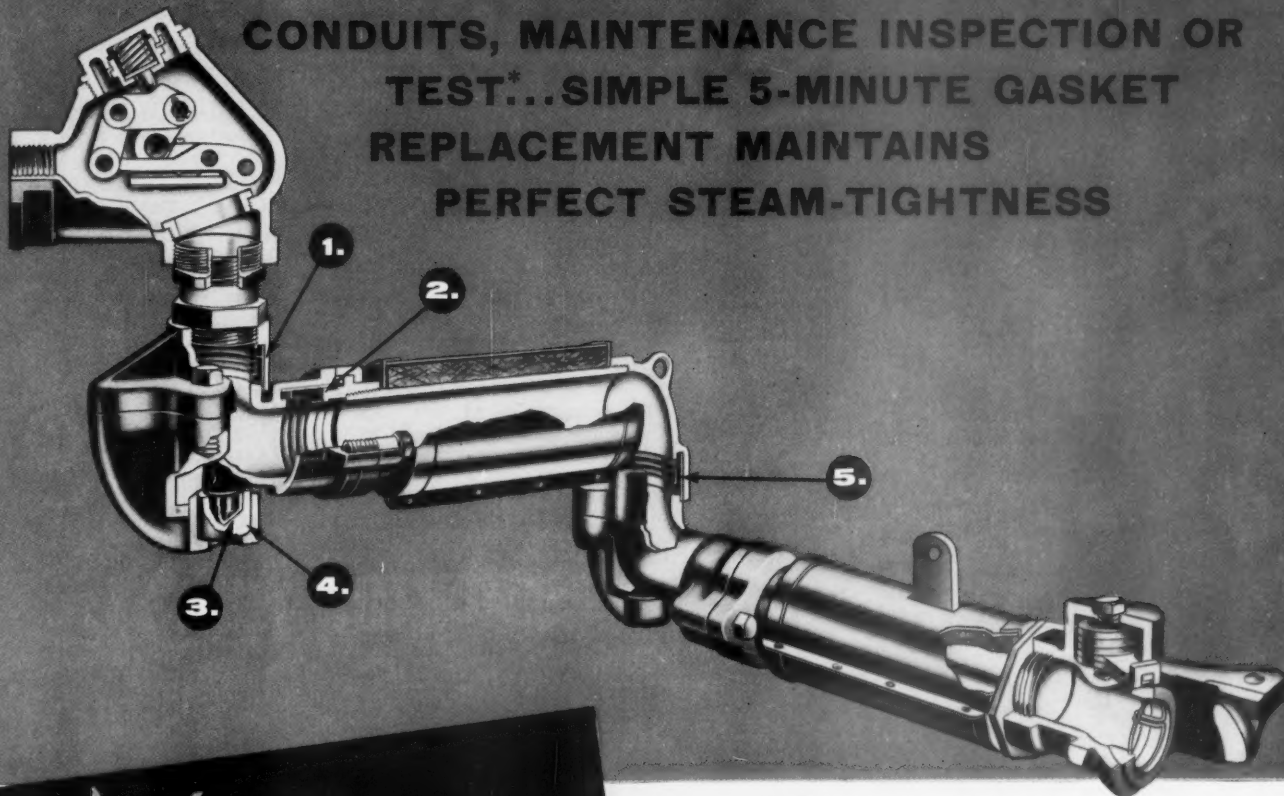
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Metal parts offer
at least 2-year service,
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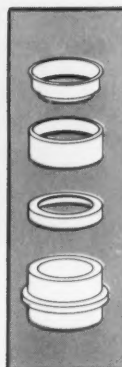
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steel cap over the
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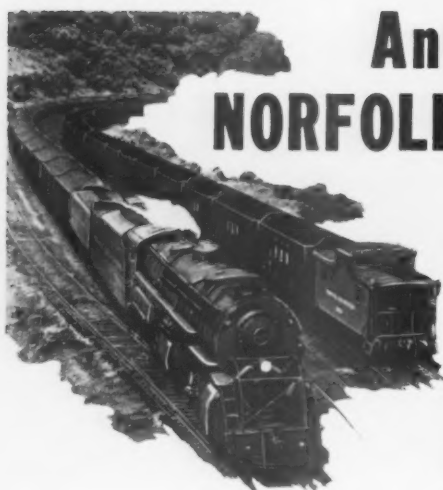


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steel gasket-cavity
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wear, corrosion.

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Annual Report for 1956 NORFOLK and WESTERN RAILWAY

General Offices, Roanoke, Virginia

During 1956, business activity continued to expand and, despite a month-long strike in the steel industry and the impact of substantial wage increases, Norfolk and Western set a number of important new records, including—

Volume of freight business handled, measured by revenue ton miles, rose 8 per cent over 1948, the previous record year—

Receipts from all sources were \$254 million, up from \$223 million in 1955, the former peak—

Earnings on Common Stock were \$7.39 a share, 11 cents above the record set in 1929—

all reflecting in important part the benefits derived from our postwar improvement program.

Capital expenditures in 1956 aggregated \$62 million, which was 70 per cent more than the amount spent for such improvements in any prior year. During the year, we acquired 4,823 freight cars—more than any other railroad—at a cost of \$37.5 million, and 42 Diesel-electric locomotive units at a cost of \$7.6 million.

Beginning in December, the quarterly dividend rate on Common Stock was 90 cents, increased from 75 cents a share, thus placing it on an annual basis of \$3.60 instead of \$3.00.

N & W BRIEFS

	1956	1955	1954	1953	1952
Earnings per share of Common Stock.....	\$7.39	\$6.70	\$4.52	\$4.83	\$5.05
Taxes per share of Common Stock.....	\$8.07	\$7.88	\$4.89	\$6.59	\$7.03
Dividends paid per share:					
Adjustment Preferred Stock.....	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Common Stock.....	\$3.75	\$3.75	\$3.50	\$3.50	\$3.50
Taxes (millions).....	\$45.4	\$44.3	\$27.5	\$37.1	\$39.6
Expenditures for Property and Equipment					
acquisitions and improvements (millions).....	\$62.0	\$16.4	\$17.7	\$32.4	\$28.8
Debt Outstanding (millions).....	\$35.8	\$35.8	\$35.8	\$35.8	\$35.8
Times Fixed Interest Charges Earned.....	30.68	27.97	19.24	20.60	20.25
Number of Share Owners.....	31,312	32,372	31,818	31,022	29,500
Bituminous Coal Tonnage (million tons).....	58.0	51.7	40.1	45.5	46.5
Other Tonnage (million tons).....	19.2	18.7	16.2	18.2	17.7
Average Revenue per ton carried one mile (cents).....	1.006	0.980	1.038	1.050	1.025
Gross ton miles per freight train hour.....	79,182	77,547	72,670	71,991	68,820
Miles of road operated.....	2,129	2,128	2,134	2,135	2,135

CONDENSED INCOME STATEMENT

	1956	1955	Increase or Decrease	Per Cent
REVENUES AND OTHER INCOME:				
Freight—Bituminous Coal.....	\$152,544,453	\$124,766,364	Inc.	\$27,778,089 22
Other.....	72,516,813	70,738,346	Inc.	1,778,467 3
Passenger.....	3,538,371	3,706,167	Dec.	167,796 5
Mail, Express and Miscellaneous.....	11,063,334	9,680,286	Inc.	1,383,048 14
Total Railway Operating Revenues.....	239,662,971	208,891,163	Inc.	30,771,808 15
Rent Income—Equipment and Joint Facilities—Net.....	11,947,152	11,999,718	Dec.	52,566
Other Income—Net.....	2,602,980	2,221,037	Inc.	381,943 17
Totals.....	254,213,103	223,111,918	Inc.	31,101,185 14
EXPENSES AND OTHER CHARGES:				
Way and Structures—Repairs and Maintenance.....	31,347,510	25,272,080	Inc.	6,075,430 24
Equipment—Repairs and Maintenance.....	49,379,984	41,778,644	Inc.	7,601,340 18
Transportation—Operations.....	70,430,515	60,309,071	Inc.	10,121,444 17
Other Expenses.....	13,759,693	11,359,891	Inc.	2,399,802 21
Total Railway Operating Expenses.....	164,917,702	138,719,686	Inc.	26,198,016 19
Taxes Other than Federal Income (See Note).....	16,001,876	13,829,953	Inc.	2,171,923 16
Interest on Funded Debt.....	1,431,668	1,431,668		
Totals.....	182,351,246	153,981,307	Inc.	28,369,939 18
EARNINGS BEFORE FEDERAL INCOME TAXES.....				
Federal Income Taxes (See Note).....	71,861,857	69,130,611	Inc.	2,731,246 4
	29,375,000	30,500,000	Dec.	1,125,000 4
NET INCOME.....				
DIVIDENDS ON ADJUSTMENT PREFERRED STOCK.....	42,486,857	38,630,611	Inc.	3,856,246 10
	909,608	909,608		
SINKING AND OTHER RESERVE FUNDS—APPROPRIATIONS..				
	*41,577,249	37,721,003	Inc.	3,856,246 10
	420,876	420,876		
BALANCE.....				
	41,156,373	37,300,127	Inc.	3,856,246 10

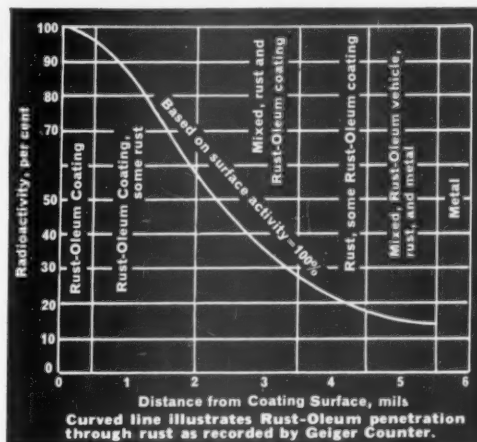
*Equivalent to \$7.39 per share of Common Stock, compared with \$6.70 in 1955.

NOTE: Total taxes of \$45,377,000 were equivalent to \$8.07 per share of Common Stock, compared with \$7.88 in 1955.

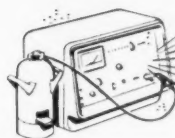
RUST-OLEUM® PENETRATION

through rust to bare metal traced by Geiger Counter. To effectively stop rust—the vehicle of a protective coating, when applied over a sound, rusted surface—must penetrate through the rust down to bare metal. **Rust-Oleum does exactly that!**—as proved by radioactive research! Rust-Oleum's specially-processed fish oil vehicle was radio-activated and formulated into Rust-Oleum 769 Damp-Proof Red Primer—then applied to rusted test panels. Penetration through rust to bare metal by Rust-Oleum's specially-processed fish oil vehicle was then traced by Geiger Counter.

You stop rust, because Rust-Oleum's fish oil vehicle soaks deep down to bare metal and into the tiny pits where it drives out air and moisture that cause rust. You save, because this same *penetration* enables you to apply Rust-Oleum directly over rusted surfaces—usually eliminating costly surface preparations. Attach coupon to your letterhead for your thirty-page report entitled, "The Development of a Method To Determine The Degree of Penetration of a Rust-Oleum Fish-Oil-Based Coating Into Rust On Steel Specimens," prepared by Battelle Memorial Institute technologists.



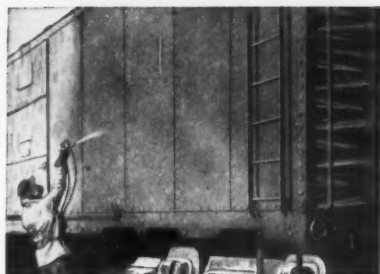
There is only one Rust-Oleum. It is distinctive as your own fingerprint. Accept no substitute. Buy—and specify only Rust-Oleum. You'll be happy that you did.



Rust-Oleum is available in practically all colors, including aluminum and white.

Your Rust-Oleum Railroad Rust Prevention Specialist will be happy to give you all the facts.

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STOPS RUST!®

ATTACH TO YOUR LETTERHEAD—MAIL TODAY

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WABCO®

takes the punch and bounces back

Wabco's ability to bounce back and regain its original contour after deflection has made it amazingly successful in air brake packing cups, as well as seals and gaskets. It is this unmatched resiliency that has reduced brake system leakage to a previously unattainable minimum. It made it possible to extend maintenance intervals because of the longer service life.

To maintain top performance, be sure to use genuine Wabco parts. Specify them by name. Each Wabco Packing Cup carries the trade mark, date of manufacture, mold number and piece number. Thus you can order and get the same high quality parts time after time.



Westinghouse Air Brake
COMPANY

AIR BRAKE DIVISION WABCO WILMERDING, PENNA.

WABCO® **Dated** Packing Cups



***Once over with KEM KOLD BILD[†] does the job of two standard coats!**

Now you can cut material and out-of-service costs by eliminating time for drying and application of a second coat. One full coat of Kem Kold Bild does it using conventional spray equipment. Kem Kold Bild dries in 1½ hours, is ready for stenciling in 2 to 3 hours. You get good film flow with a minimum of overspray. And a dry-film thickness as heavy as 2½ mils.

This cold-spray synthetic enamel produces a bright gloss of exceptional durability, too. Withstands re-

peated cleanings and toughest service. Kem Kold Bild doesn't lift or affect primers. There's no pin-holing or bubbling from entrapped solvents during or after application.

Kem Kold Bild is being used by leading railroads and car builders now. Why not arrange for a demonstration by contacting The Sherwin-Williams Co., Transportation Division, Cleveland 1, Ohio.

[†]Trade-Mark

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EXTENDED LIFE
SPRINGS ...

... COST NO MORE
THAN ORDINARY SPRINGS ...





E-X-T-E-N-D-E-D LIFE SPRINGS

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progress through
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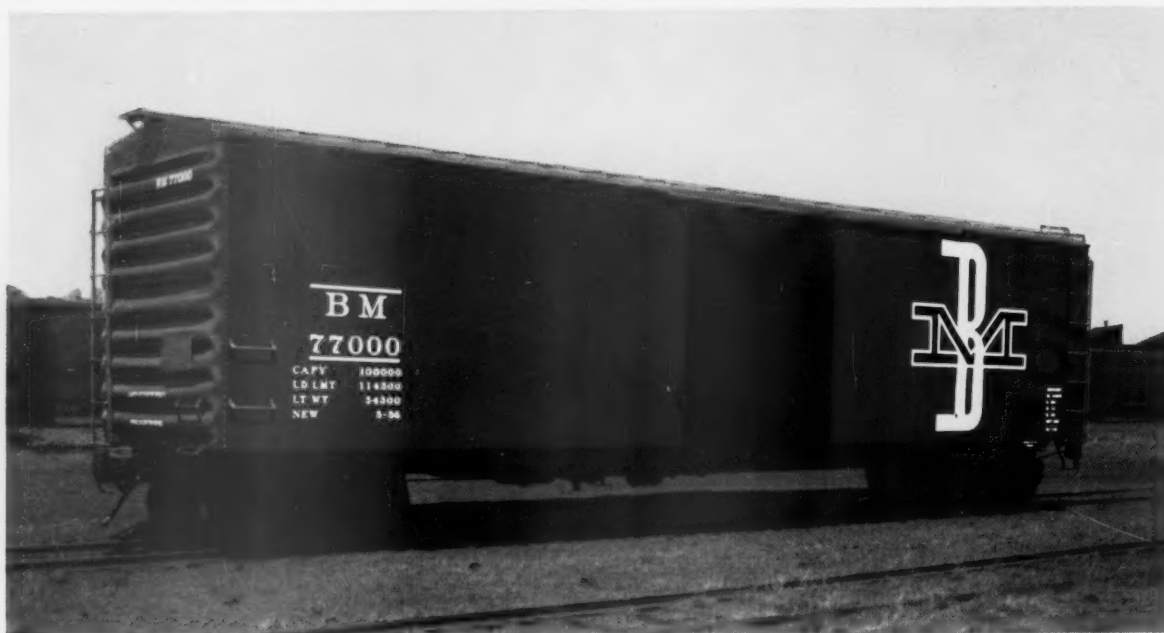
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THAN TWICE AS LONG

Pittsburgh's Synthetic **CARHIDE** ENAMEL

**Protects and Beautifies
New B. & M. Freight Equipment**



One of the fleet of new B. & M. freight cars painted with CARHIDE Enamel by the Pullman-Standard Car Mfg. Co.

THEY'RE the talk of the day in railroad circles—these strikingly different freight cars painted for the Boston & Maine Railroad by the Pullman-Standard Car Manufacturing Company. Hundreds of these colorful new cars have been recently finished with Pittsburgh's CARHIDE Synthetic Blue Enamel.

- **This unusual color** treatment makes them good for thousands of extra miles of advertising that builds prestige and good will wherever these cars travel.

- **This new CARHIDE Enamel** provides a glass-smooth, extra durable surface that

retains its brilliant gloss and color. In addition to its long-lived beauty CARHIDE Enamel goes on easily and dries with surprising speed. Freight cars can be painted with attractive new colors in "around-the-clock" cycles, ready for stenciling after overnight drying.

- **Why not avail yourself** of Pittsburgh's long experience in providing a wide variety of attractive and durable finishes for many of the nation's leading railroads? We'll gladly discuss your finishing problems with you at your convenience. Pittsburgh Plate Glass Company, Industrial Finishes Division, 1 Gateway Center, Pittsburgh, Pa.



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PITTSBURGH PLATE GLASS COMPANY

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**The world of science behind
EXIDE-IRONCLAD BATTERIES**



Being interviewed is Curtice C. White, Senior Development Engineer.

"These channels actually cool the battery"

*At the Exide Laboratories—***Reporter:** First, Mr. White, tell me what makes a battery hot.

White: Heavy loads—they often raise battery temperature as much as 20 degrees.

Reporter: How do the channels cool it?

White: The heated electrolyte rises to the top through the channels. Plates are cooled by electrolyte coming up from the bottom.

Reporter: Don't all batteries have channels?

White: Unfortunately, no. It is the tubular construction of the Exide-Ironclad positive plate that leaves these channels on both sides.

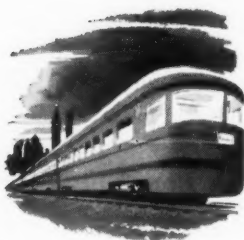
Reporter: What does this feature mean in battery performance?

White: Longer battery life, for one thing. The battery stays cooler. Has less incidence of hot spots. Plates operate at a more uniform temperature.

Reporter: Obviously this is an important feature of Exide-Ironclad.

White: Yes it is, but it's just one of many engineering details that contribute to its high capacity and long life.

Note to battery users: Whenever you order heavy duty batteries or the equipment that requires them, be sure to specify Exide-Ironclad. For detailed bulletin, write Exide Industrial Division, The Electric Storage Battery Co., Philadelphia 2, Pa.



THE ELECTRIC STORAGE BATTERY COMPANY **Exide®**

WHY NOT . . .

Motion Weighing in Flat Yards?

Over a period of years motion weighing has been proved successful in gravity yards. It's accurate and a great time-saver. Our contributor states that electronic scales in flat yards would save time too. He points out that a cut of 15-20 cars could be weighed in motion in about five minutes.



It now has become possible to study the record of testing two of the oldest electronic scales installed in gravity yards, using check tests that had been made over a period of twelve months ending recently. The test procedure was to take separate loaded cars, selected at random, weigh each one both at rest on a conventional lever scale and also in motion by electronic cells and instrumentation.

There were 286 tests used in the study. Six other tests in the record were not used because the weight indicator was oscillating due to bouncing car springs, flat wheels, or other causes, which usually result in the car being reweighed. Results of these 286 tests, in summary, were:

- 78 (27%) motion and static weights were the same;
- 178 (62%) motion and static weights were within 100 lb of each other;
- The greatest individual car difference was 400 lb;
- The mean average difference was -64 lb per car, or -0.06%;
- The gross average difference, disregarding plus and minus, was 153 lb per car, or 0.14%;
- The total weight of the 286 cars was 30,871,000 lb which gives a total average difference of -18,300 lb.

While motion weighing generally is associated with gravity yards and car retarders (or riders) it also is used to some extent in flat yards. A flat yard is one "in which the movement of cars is accomplished by a locomotive without material assistance by gravity" (American Railway Engineer-

ing Association definition). While there may be grades in a flat yard they are of no great assistance in switching.

The method of operation in a flat yard is for the locomotive to "kick" the cars, with sufficient speed to overcome the resistance to rolling, into a flat track. Since the cars are subject to jolts and hard pushing at the point of switching a motion weighing scale is not practical on the switching lead.

Deciding to place such a scale in a flat yard generally presents no serious difficulty, especially if the number of cars to be weighed is relatively small. This usually is the case in a flat yard because it generally handles a smaller number of cars than a gravity yard.

A separate scale track can be provided which is roughly parallel to the lead and ladder with the scale in the middle. This track should be connected to the lead at one end and at the other to the outside track at the end of the ladder.

The approach end above the scale is elevated to about two feet above

the level of the rest of the track. A down grade through the scale begins about 50 ft in front of the scale and should run about 200 ft beyond it. The grade is about 0.6%.

The method of operation is to set out weigh cars while switching a cut, usually in the outside class track. When switching of the draft is completed, weigh cars are pulled back to the scale track and pushed one at a time over the crest of the grade, from which point they will roll across the scale. The 0.6% grade is sufficient to overcome rolling resistance and give moderate acceleration to most cars.

Fall Provides Speed

Since the scale is near the top of the grade the acceleration is not enough to prevent motion weighing at moderate speed, while the rest of the fall below the scale will provide enough speed to carry the car several hundred feet into the flat portion of the track. On the other hand the fall is not likely to cause more than normal coupling speed. (Skates should be provided to prevent especially easy rollers from rolling out the end of the track.)

All of this assumes that most of the cars are "easy rollers," or at least that there will be few "hard rollers." This is not an unreasonable assumption for normal railroad conditions. However, where cars have been held a long time, such as "no bills," they may become hard rollers and journal boxes may need attention before the cars are put in service.

By J. N. TODD

Mr. Todd was formerly superintendent of scales and work equipment of the Southern. He also served as chairman of the yards and terminal committee of the American Railway Engineering Association and as chairman of AREA's subcommittee on scales. He recently became engineering consultant to Cox & Stevens, Electronic Scale Division, Revere Corporation of America.

But what size of scale is needed in such operations? We probably can assume safely that few 65-ft cars will be handled. Where many such cars are handled, of course, the scale conditions will have to be suited to them, but in the average yard 65-ft cars to be weighed are so few that they can be handled specially. If our assumption about 65-footers is correct our scale size could be based on a maximum car length of 52 ft 6 in. Certainly the great majority of cars will be not over that length. The wheelbase of gondolas 52 ft 6 in long is so close to 50 ft that we may assume that length.

The time required for the motion weighing cycle is about three seconds, and as the car must be alone and entirely on the scale that long, the length of the scale must be equal to the wheelbase of the car plus three times the speed in feet per second. Let us assume the middle of the scale

as the point of average speed of the rolling car, fix it at 85 ft below the top of the grade and use the acceleration formula, the height of fall being determined by the grade minus the rolling resistance of the car.

Without further assumptions and avoiding tedious solution of formulas let us say the average speed comes out 4.96 ft per second. This figure times three seconds plus the 50-ft

"We have a 94-ft electronic track scale at our Englewood [hump] yard at Houston. This scale was placed in service in December 1954. . . . At the present rate, we expect the scale to have paid for itself completely by January 1958 by decreasing cost of weighing cars. This figure does not cover the most important feature of motion weighing; that is, the fact that cars leave the terminal with no delay whatsoever as a result of having been weighed. This one feature justifies the cost of this modern equipment." (Railway Age, July 30, 1956, p. 16).—R. A. Hostetter, general superintendent maintenance of way equipment and scales, Texas & New Orleans.

wheelbase gives nearly 65 ft. A 66-ft scale would be long enough, and that is not an unusual length.

It seems possible therefore to extend the field of automation to the flat yard to a greater extent than at present by including motion weighing. The time saved over spot weighing is obvious when it is realized that a cut of 15 to 20 cars can be weighed in motion in about five minutes.

How to Cut Down on Down Time

New York Central develops a program to get maximum use of high-speed office equipment by checking how much of every work-day machines are in service.

Installation of a second medium-size computer in the New York Central's Utica expenditures office May 3 will be the direct result of a continuing program aimed at getting maximum use of high-speed office equipment where it's needed most.

Expanded use of modern data processing apparatus makes it vital to railroads to determine whether they are underequipped or overequipped. The Central developed a machine use study to find out that very thing.

One of its first by-products was the realization that overtime rentals of an IBM 650 computer installed at Utica last year resulted from the daily accounting work reaching its peak in midafternoon—in volume that was too much for the computer to digest.

The new machine—also a "650," but equipped with two Type-533 read-punch units—is being rented on an afternoon-evening basis. It'll be available for the "rush" hours, won't be standing idle in the mornings and will be on hand for night work preparing

data for the following day on straight-time rentals.

But, is renting two machines cheaper than paying overtime rents on just one? "Affirmative," say the Central planners. How so? "By enabling us to eliminate less flexible punch card devices—and by giving us the chance to program some new jobs for the Utica office."

The Central has trimmed two tabulators, a punch card calculator, three sorters, a key puncher and two summary punch machines from the Utica office—all of these formerly used on two-shift rentals—and still more reductions are planned.

How much money the road will save hasn't been established definitely but it was estimated that use of the single "650" achieved savings of \$2,500 in year-end work.

Snagging railroad efforts to make costly modern office machinery really pay off is the amount of idle time that crops up when there is no work, or jobs are not in shape for the machines

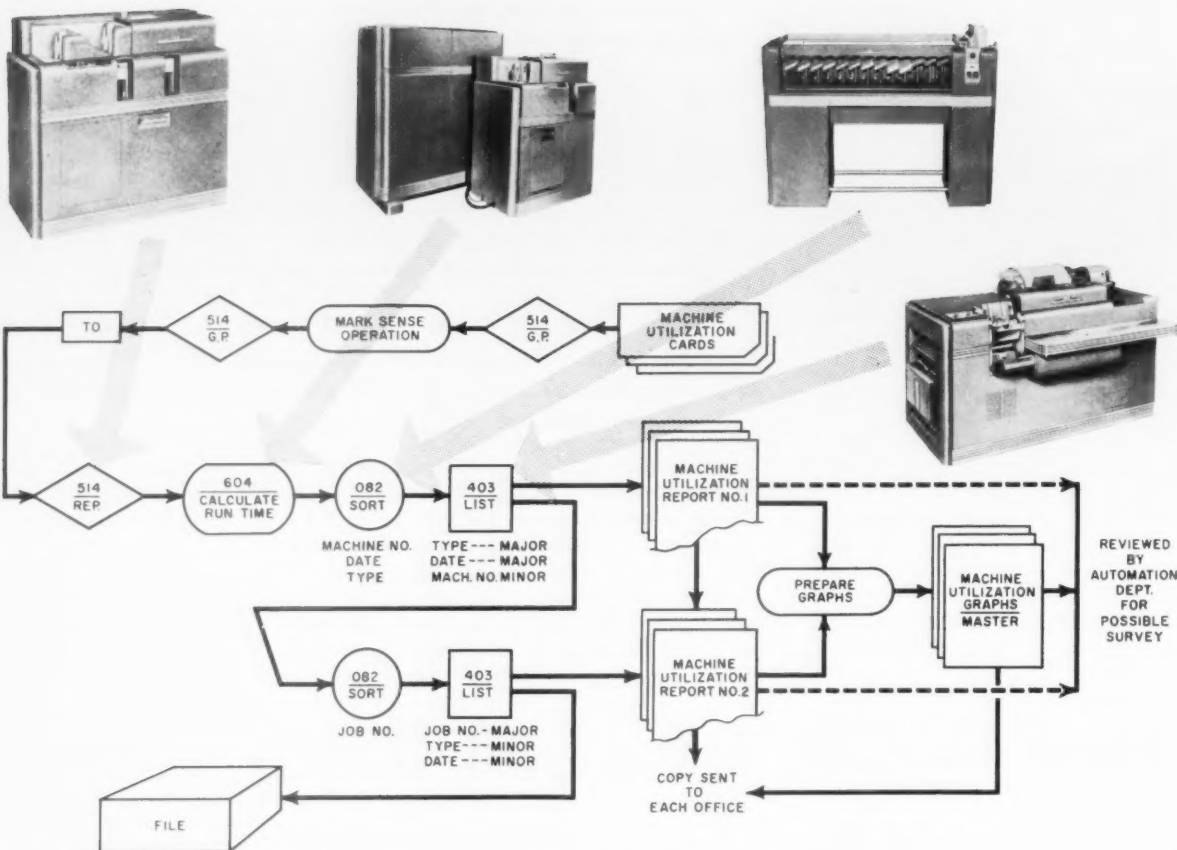
to do. This is in addition to the hours of routine down time for periodic inspections and servicing or for repair. The danger is that unless the modern devices are kept busy, their idleness might offset the economies they otherwise make possible.

How many hours out of a day or week each machine should be kept busy to realize this money-saving potential is something that hasn't been determined. The New York Central and doubtless other roads with the same problems are trying to establish some sort of norm. But, first of all, the Central, chopping away at the excesses that are more readily discerned, figures it can set up usage requirements for different machines as it goes along.

To start, the Central is looking for the answers to these questions:

- Do we need additional machines?
- Can we do without certain machines?
- Is there enough time—at the right time—to introduce new job applications?
- How much time do our present applications consume?
- Are our machines being used efficiently?

NYC Assistant Comptroller H. W.



ANALYSIS of machine utilization follows process diagrammed here. It starts with preparation of use card for every job on each machine. Two reports are drawn off

same cards to provide for crosscheck between total machine use and time consumed on individual jobs. Program logically uses modern equipment like units above.

Porter informed personnel that "answers to these questions require specific information—both past and present. In many instances present methods of gathering this information are considered too troublesome to be practical."

Needed, he said, is a system that would be fast, economical, efficient—and flexible, too.

"Efficiency... is one of our basic objectives. We should constantly search for methods which for a given expenditure of time or effort accomplish more work, give greater accuracy or take less time. Effective use of time will determine to a large extent the efficiency of our operations."

Thus he introduced the procedure adopted in the "machine utilization program" of the Central's Automation Department under the direction of R. J. Henderlong, chief systems analyst.

Under the program, punch cards are distributed among operators of of-

fice machinery in the Central's accounting department. The operators indicate on the cards—using a fresh one for each job done on each machine—the time and date a particular assignment is started and when it is completed. The cards then provide a record of how long each machine actually runs on a given job and on a given day.

The operators' time notations—having been entered on the punch cards with "Electrographic" mark sensing pencils—can be "read" automatically. The cards are processed through sorters, reproducers, punch and accounting machines to establish the record sought. Filed, the cards provide a ready source of information and serve for monthly compilations of use charts for each type machine.

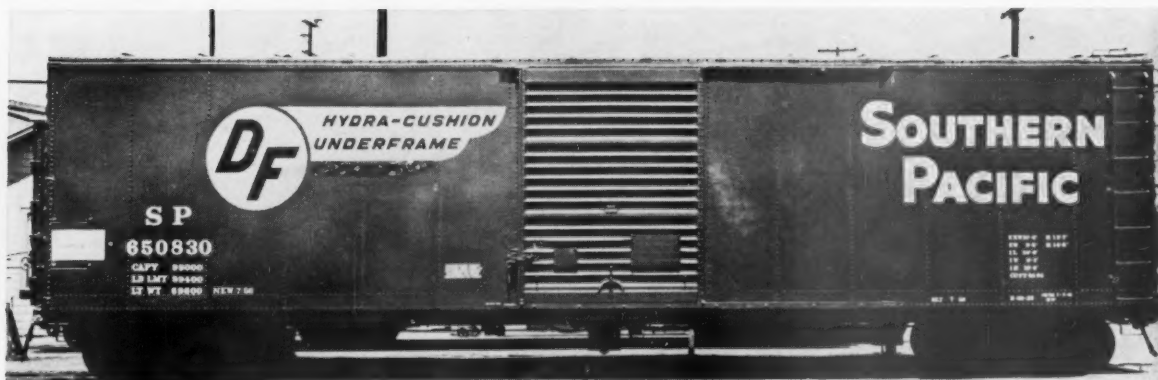
It is these charts, prepared in New York under Mr. Henderlong, which establish the picture of whether a given machine is being used efficiently.

"This system does not exist merely

in theory," Mr. Porter stated. "It is an actual working procedure now in effect. It has enabled us to properly evaluate our new EDPM equipment as well as to provide us with facts and figures whereby we are able to realize significant economies in our operations by removing unnecessary equipment."

Breakdown of the overall accounting machine operation is made possible with the new system. Trouble spots are located, involving machines standing idle too long or machines overtaxed by periodic peak loads.

At Utica, it was found that some machines had been used as little as 19% and 11% of the time they could have been in use. It was shown that the number of machines could be substantially trimmed without loss of efficiency—and at considerable savings. On the other hand, it was also found that some machines whose operating time was thought to be under par, had to be kept in use in order to meet recurring peak loads.



COUPLING SPEEDS up to 10 mph are not destructive with this construction, SP experience shows.

ROAD TESTS LEAD TO ORDERS . . .

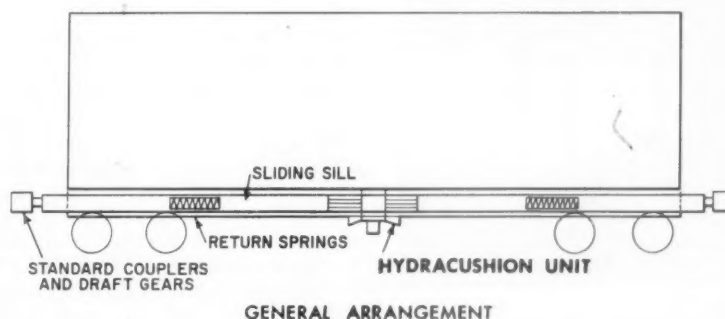
Hydraulic Squeeze 'Licks' Recoil

With two years of successful road tests completed, the Southern Pacific plans to construct 350 new hydra-cushion underframe box cars at its Sacramento shops, beginning this month.

Developed by the Stanford Research Institute, under SP's sponsorship in conjunction with SP research engineers, this new underframe is designed to ease the shock of coupling cars. According to SP spokesmen, the device reduces the jar of cars meeting at 10 mph to the equivalent of a velvety four-mile-per-hour coupling.

tion to speed and severity of impact. The springs return the sliding car sill to normal position.

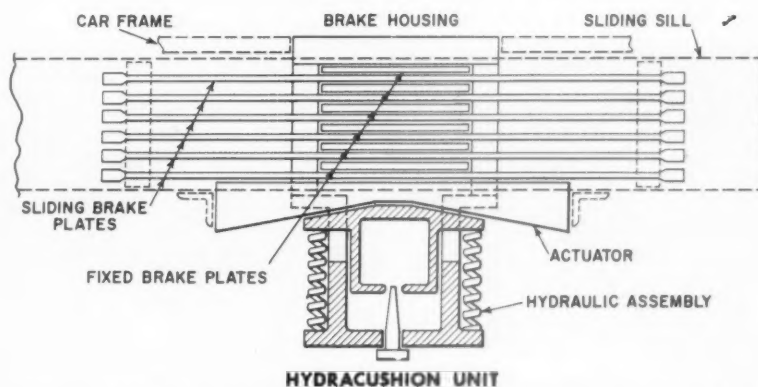
Other special features being incorporated in the cars will include DF loaders and roller bearings.



Floating Car Sill

The principles on which the device operates were explained in *Railway Age*, May 9, 1955, p. 30. Basically, a set of sliding friction plates is actuated by a hydraulic device to produce cushioning action between the carbody and the floating car sill. This floating car sill runs the length of the car and carries the couplers and standard draft gears.

As the car sill moves under the shock of coupling, hydraulic pressure from the cylinder squeezes the sliding brake plates against the fixed brake plates producing shock absorption, without undesirable recoil, in propor-



HOW IT WORKS: Cushioning effect is obtained with sliding and fixed brake parts, hydraulic assembly and actuator.



NEW SUBURBAN STATION at Edmonds, Wash., harmonizes both in architecture and function with the environment.

Stations Go Modern

Serving Suburbanites . . .

A new look and a new service are now being enjoyed by Seattle suburbanites. At an up-to-date suburban station recently built by the Great Northern at Edmonds, Wash., 17 miles north of downtown Seattle, all of the road's transcontinental and international (Seattle to Vancouver) trains make conditional stops. This new service, says Thomas Balmer, GN vice-president at Seattle, "is geared to the changing needs of travelers."

The new station—replacing one built in 1891—will not serve as a commuter facility. Its purpose is to accommodate travelers to and from non-local points—eliminating the need for the suburban dweller to go out of his way to reach Seattle's downtown King Street station.

Local-Flavored Architecture

Seattle's population center is considerably north of the downtown area, so it is expected that the new facility, with parking accommodations for 175

cars, will not only be welcomed by present patrons, but will attract new business. About 250,000 people live in the northern suburbs near Edmonds.

The new facility provides all ticket and reservation services, as well as baggage, express and freight handling. Designed in keeping with modern architecture of the Puget Sound region, the new station features materials most common to the West. The exterior of the building is in rough cedar siding with some areas faced with roman brick.

The interior is paneled in knotty western cedar. Windows are framed in aluminum.

The passenger platform is of concrete, except that the trackside platform beyond the station proper, and the parking area, are paved with asphaltic concrete. The parking area is enclosed with steel mesh fencing and the entire station area, more than two city blocks in length, is flood-lighted.

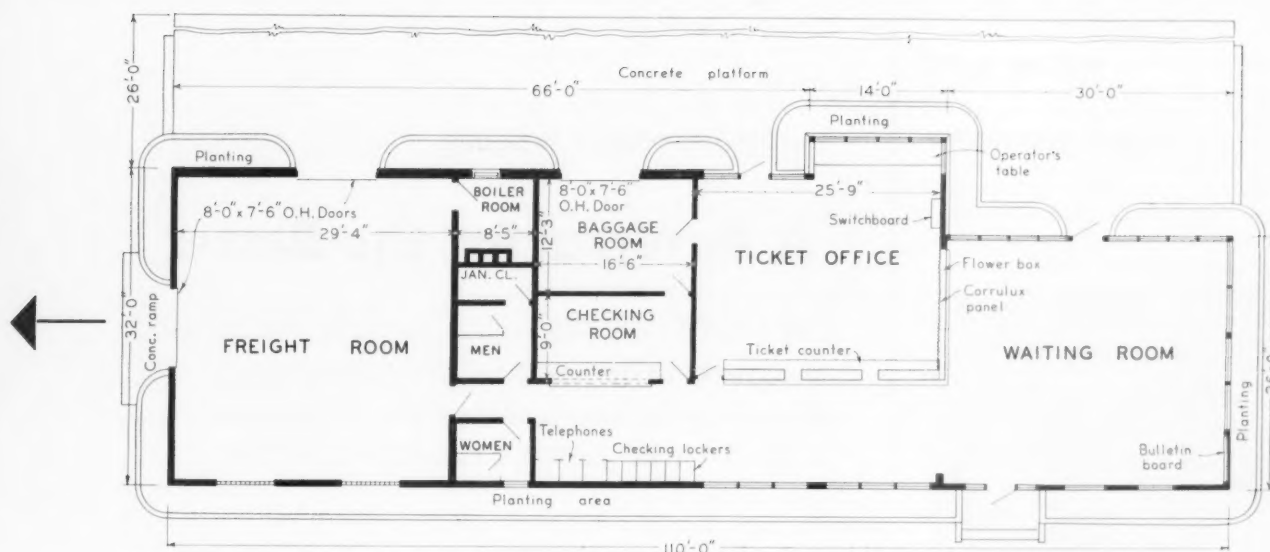
Construction of the \$160,000 facility included single-tracking the GN's main line for several hundred feet north and south of the station. This was done as a safety measure for passengers boarding or leaving trains bound in either direction.



TILE FLOORS and cedar paneling add to the attractiveness of the waiting room. Ticket counter is at extreme left behind corrugated plastic panel.



LIGHTING of the interior shows to advantage with the extensive fenestration of the waiting room.



FUNCTIONAL layout is combined with generous use of windows, many of which overlook Puget Sound.

...for Convenience and Utility

Setting a Standard . . .

A pylon projecting above a new building alongside the Missouri Pacific tracks at Palestine, Tex., serves two functions.

The name on the pylon proclaims that the structure is the road's Palestine passenger station. Its modern lines serve notice that the building is of advanced design, representing a

complete break with railroad tradition.

The new single-story building is characterized by low, flat lines and large areas of glass in the walls. Equally important is the combination of materials used on the exterior. These include Colorado red ledge-stone, extruded aluminum panels, and Colorado granite trim, a material that

contributes to the striking appearance of the pylon. Basic structural features include a structural steel frame for supporting the roof of lightweight concrete covered with white marble chips. Guttering and downspouts are of copper.

In addition to facilities for passen-
(Continued on page 44)



CONTEMPORARY DESIGN AND ARCHITECTURE of the new MP station contrast strikingly with the cupolas, ornate scroll work and old-fashioned arrangement of the multiple-story building, dating from 1891 (left), which it replaces. As the new structure took shape on the same site, the old one was dismantled piecemeal. Other modern stations have been built on the MP in recent years. And more are to come. For these future stations it is expected that a style similar to that used so effectively at Palestine will be adopted as standard.



HOW ARE THEY DOING?



"THE TEAM"—Clyde J. Fitzpatrick, president (left), and Ben W. Heineman, chairman.

Some day this spring, a new \$5 million shop at Clinton, Iowa, will begin repairing freight cars for the Chicago & North Western on a mass-production basis. Replacing repair facilities scattered at 14 points around the 9,400-mile system, the Clinton shop is expected to pay for itself in about three years.

Later this summer, power shovels will begin digging into a North Western-owned hillside of pink and lavender quartzite in southern Wisconsin, quarrying high-grade ballast from a trackside site big enough to meet the road's needs for the foreseeable future.

By the end of the year, signal gangs will have installed \$3.5 million worth of automatic crossing protection at 126 locations—an expenditure on which the North Western figures to realize a return of 59.5%.

And on some yet unknown date in 1957, the Chicago & North Western, which last year reported a net loss of more than \$5.5 million, will find itself operating in the black.

These are some of the accomplishments—and that is the prediction—of Ben W. Heineman, the persuasive lawyer and former president of the Minneapolis & St. Louis who a year ago last April 1 sat down behind the North Western's managerial throttle.

Chairman Heineman—with President Clyde J. Fitzpatrick, ex-operat-

... ON THE NORTH WESTERN

'A Reversal for the Better'

The C&NW lost \$5.5 million last year but the new management remains optimistic about its future. One year under the team headed by Ben W. Heineman has, to say the least, made it a talked-about railroad.

ing vice-president of the Illinois Central, across the cab from him—has given the venerable North Western a merry ride these twelve months.

"Faucet" Is Closed

That Heineman-Fitzpatrick team has in its first year given the railroad fraternity something to talk about—something far removed from those traditional misfortunes of the North Western: short haul, unproductive branch lines, commuter service, Spartan maintenance, and no money.

Shortly after he took over the North Western, Ben Heineman told Railway Age that the first job of the new management was to "shut off the faucet on cost"—to produce more dollars quickly through greater operating efficiency. Today, he feels that this job has been progressed to a definite point of change.

The more or less obvious economies, those which could be promoted with little or no expenditure of money, are out of the way. Examples:

- Better scheduling and maintenance of diesels has permitted retirement of steam power and the facilities to service it, earning the North Western more than \$1.8 million return from the scrap.

- Wholesale scrapping of 3,000 freight cars unfit for economical repair has speeded up yard operations and provided \$3.3 million more in cash.

- Improving the operation of Proviso yard has permitted a large part of the widespread terminal to be

closed and has released 74 acres for industrial development.

Now, the North Western management thinks, the job has become one of spending money to make money—to begin to standardize and mechanize, sometimes at considerable cost. This phase of the program depends largely on the first phase for its financing; considering its self-imposed "conservative" financial policy, there is no evidence that it will want to drain an already closely trimmed bank account.

The North Western, too, is still checking off first those improvements which will earn the greatest return. Therefore, freight service probably will still rate more attention for a while than will passenger service, though it is pointed out that passenger operations need overhauling too.

Report to Stockholders

The Heineman-Fitzpatrick team summed up what it sees of the future of the North Western in its first annual report: "Despite a substantial net loss, 1956 will be thought of in retrospect as the year that marked a reversal for the better in the fortunes of your railroad."

The new executives expressed themselves on the numerous staff changes: "Where necessary, new supervisory personnel, who share our conviction . . . and who are competent to execute policies initiated toward that end, have been employed or promoted."

On their progress: "Just as it is

necessary to dig before one can build, so has it been necessary laboriously to provide firm foundations for the sound structure we expect to erect. While this process has been slower than we might have wished, much has been accomplished; and we believe that with the passage of time progress toward the desired results will become increasingly apparent."

On costs: "The North Western has been notable for the highest wage-revenue ratio of any major railroad in the United States. This has made the absorption of steadily increasing wage costs more difficult for it than for its competitors, since the impact has been proportionately greater, and the offsetting rate increases proportionately less adequate."

On the big problem: "The basic problem of your railroad is to increase the productivity of all personnel through better supervision and through providing a high degree of mechanization. Implicit in this is the simultaneous elimination of duplicating or non-productive and unneeded work and services wherever found."

On how all this will help: "Improvement in your company's competitive position will follow as a matter of course. It will be our policy to capitalize on this improvement through an aggressive and carefully planned sales effort."

Just what this "aggressive and carefully planned sales effort" is hasn't yet been announced. The North Western is known, though, to be trying out new methods of "beefing up" sales techniques. And before long this road which helped bring piggybacking back into style a few years ago is expected to join Trailer Train and begin hauling trailers of common-carrier trucks.

Work and Study

But for the moment, the problem remains basically one of modernizing the operating and business properties. Much already has been done here and, according to the management, much more is under way or being studied.

Considerable physical streamlining of the railroad remains to do. Some second track doubtless will come up, and more CTC will be installed. Terminal congestion in Chicago and Milwaukee pose huge problems and

promise significant savings if the problems can be solved.

The North Western, for instance, would like to retire its Erie Street suburban coach yard in Chicago and develop the property industrially. It has a choice of locations for a new coach yard—the present California Avenue, 40th Street and Mayfair yards among them—but the development of any of these would create new problems to replace the old.

Design and Function

A long-range program of mechanical standardization is also under way. Obsolescent diesel units are being upgraded; certain items of equipment will be sold, including four road passenger units off the now-leased "Omaha" road and the C&NW's own three Budd RDC's. Even in revised paint schemes on locomotives and box cars the trend toward functional design can be noted.

As to suburban service, an operation the North Western management regards as inevitable, and one that

is steadily growing (21,188,000 passengers in 1955; 22,546,000 in 1956)—some hard thinking is being done. The road is known to be looking for double-deck suburban cars which, according to one source, "break out of traditional patterns." It has been studying new methods of pricing and ticketing as well.

For all of this, the North Western so far this year is still a money-losing business. But the losses are markedly below what they were in the early months of 1956. The total net loss for the first two months of 1956 was \$5,877,452; for the first two months of the current year it was \$927,873.

And the uninhibited enthusiasm for the job ahead, not only on the part of Ben W. Heineman and Clyde J. Fitzpatrick but farther down in the staff as well, seems to indicate that if the North Western isn't in pretty good shape when its shareholders meet May 21, and in even better shape on the new management's second anniversary next April 1, it won't be because nobody tried.

(Continued from page 15)

Escanaba, a few miles from Sterling Harbor, provide "adequate service," and establishment of LS&I facilities nearby would be damaging to the volume of service.

Supply Trade

Armco Drainage & Metal Products, Inc., will build a new manufacturing plant in Wellington, Ohio, which will be the 54th in a chain of Armco Drainage plants scattered throughout the United States and Canada. It is expected the new plant will go into operation next July. **Alvin J. Mistler** and **Delbert J. Stoker** have been elected vice-presidents. They will continue as manager of the midwestern division at Topeka, Kan., and manager of the north Pacific division, at Portland, Ore., respectively.

William E. Crowley, Pittsburgh sales representative for **Garlock Packing Company**, has been named to the San Francisco branch as district manager.

Robert A. Laws, assistant chief engineer, **Baker Raulang Company**, has been named manager of sales engineering.

Addison Davidson, Jr., sales engineer of **Femco, Inc.**, has been appointed eastern district sales manager, Quakertown, Pa.

Evans Products Company has announced that its wholly owned subsidiary, **Evco, Inc.**,

has changed its name to **Haskelite Manufacturing Corporation**. **R. B. Evans**, vice-president of **Evans Products**, has been elected president and treasurer of **Haskelite**. **F. A. Keihn** is executive vice-president, and **A. N. Williams** is vice-president, sales.

William S. Morrison, vice-president—commercial, of **United States Steel Export Company**, has been appointed president, succeeding **George W. Wolf**, retired.

Earl A. Frazier, Cleveland district sales manager of **John A. Roebling's Sons Corporation**, has been appointed New York district sales manager for the wire rope and aircord division.

W. Leon Harper, general sales manager of the **Tile-Tex** division of **Flintkote Company**, at Chicago Heights, Ill., has been appointed manager of sales for the industrial products and **Tile-Tex** divisions, at New York.

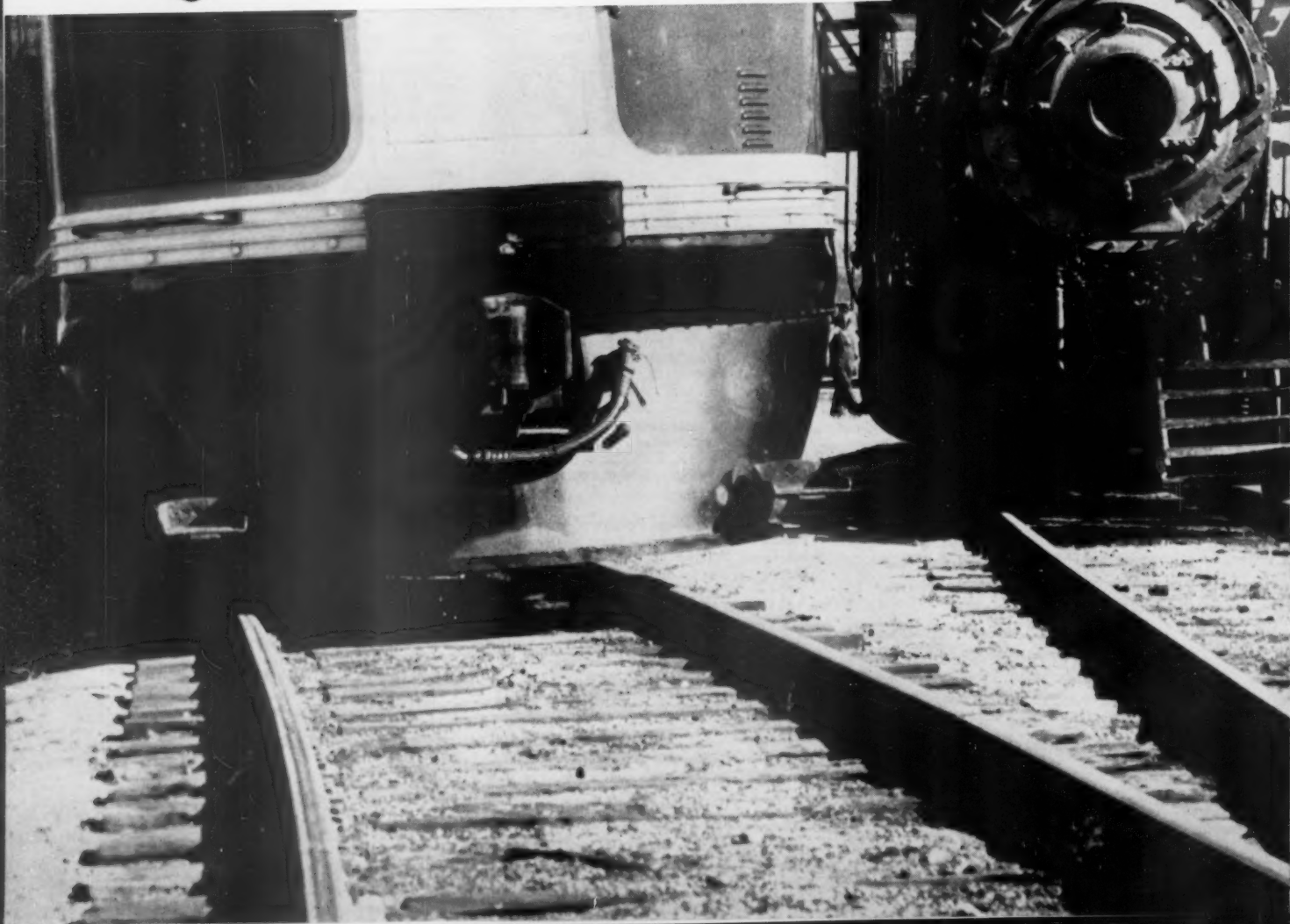
H. C. McDaniel, manager of technical information for **Westinghouse Electric Corporation**, has been named director of technical information, and **Robert V. McGahey** has been appointed manager of technical publicity.

Servo Corporation of America has appointed **Instrument Associates**, Arlington, Mass., as its sales representative in the New England states.

R. L. Lineker, until recently manager, railway department, of **Warnock-Horsey Company, Ltd.**, has been appointed assistant vice-president of **Adanac Supplies Limited** and **Canadian Waugh Equipment Company**, Montreal.



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The story of how a major road cuts costs drastically with a modernized communications network is told in an interesting illustrated brochure. For your copy of Circular #1763, write or call Automatic Electric Sales Corporation, 1033 W. Van Buren St., Chicago 7. In Canada: Automatic Electric Sales (Canada) Ltd., Toronto. Offices in principal cities.

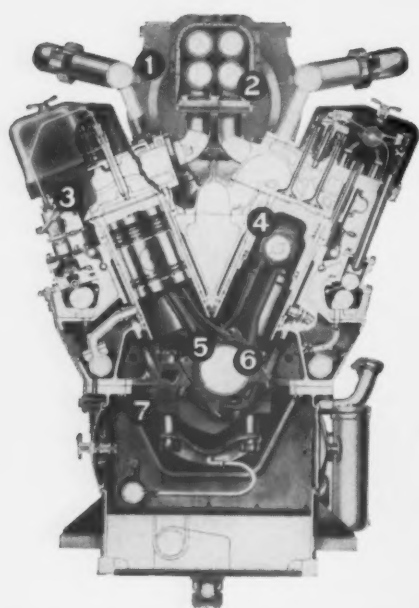


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Cross section of 244 engine shows major improvements accomplished in reprofiting: (1) water-cooled turbo; (2) Ni-Resist exhaust manifold; (3) high-pressure fuel injection system; (4) Ni-Resist insert pistons; (5) grooveless and partially grooved bearings; (6) hardened, chrome-plated crankshaft; (7) serrated cylinder block and caps.

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YOUR LONG-SERVICE ALCO LOCOMOTIVES

New ALCO program reduces maintenance costs, raises locomotive availability; returns are large for small investment

We call it "reprofiting"—a way you can obtain a much higher return on your long-service ALCO 244-powered locomotives at a small investment. It's a return that—if you are operating more than a few locomotives—can run into six figures a year. That's important money, and this is how reprofiting works to gain it for you.

Reprofiting lowers the operational cost per mile of long-service locomotives. Diesel-engine design and performance standards have changed markedly in the past ten—or even five—years. Substantial design improvements have been made in the 244 engine, particularly in areas where maintenance was high. Result: engine maintenance costs can be reduced materially by the reprofiting process, which includes application of improvements such as hardened crankshaft, better bearings, water-cooled turbo, Ni-Resist exhaust manifold, serrated fit between caps and block and others.

Reprofiting adds locomotives to the fleet. Programs nearing completion have demonstrated that substantial increases in mileage per month per unit are the result. Design improvements provide increased service life and assure greater dependability.

The cost of reprofiting is low. And the least expensive way to accomplish it is through ALCO's programmed plan. ALCO has the equipment, the personnel and the techniques to accomplish this work at the best price. All work done in ALCO reprofiting, as well as the parts applied, is covered by an ALCO warranty.


We hope you will investigate reprofiting. Your ALCO representative can give you more details, and he will work with you in developing specific data and in drawing up a reprofiting plan. Or, if you wish, you may initiate action by writing Transportation Products Division, Dept. TR-2, P. O. Box 1065, Schenectady 1, N. Y.

The ALCO logo consists of the word "ALCO" in a bold, sans-serif font, enclosed within a dark rectangular box.

ALCO PRODUCTS, INC.


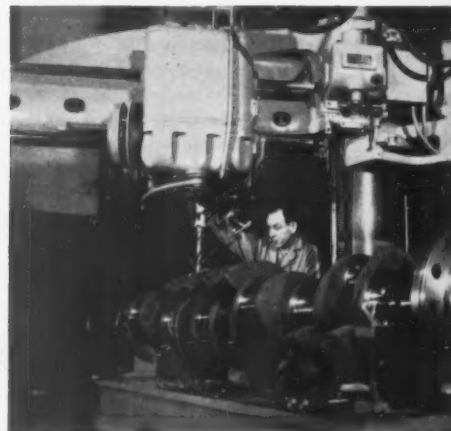
NEW YORK

Sales Offices in Principal Cities

A small diagram showing a horizontal arrow pointing to the right, with a small square at its tail, indicating a process flow.

ALCO completely remanufactures 244 engines in reprofiting schedule. Engine is dismantled, cleaned, parts repaired, major improvements applied. ALCO's programmed plan of reprofiting incorporates best features of unit exchange and repair-and-return.

Special ALCO facilities, such as those for chrome-plating crankshafts, lower the cost of reprofiting for you. You also get the advantage of work done by specialists who know the engine best. Shaft, right, has been chrome-plated for hardness and machined back to original dimensions, now is being balanced. Cost: a fraction of that of a new shaft.

A small diagram showing a horizontal arrow pointing to the right, with a small square at its tail, indicating a process flow.

People in the News

ARKANSAS & LOUISIANA MISSOURI.—Travis Davis appointed general freight agent and assumes the duties of C. C. Maxcy, assistant traffic manager, retired. Position of assistant traffic manager abolished.

ATLANTIC COAST LINE.—P. L. Harper, assistant Florida freight traffic manager, appointed Florida freight traffic manager, Jacksonville.

W. H. Henderson, assistant vice-president—traffic, Wilmington, N.C., retired April 7.

BANGOR & AROOSTOOK.—Cecil E. Garcelon, superintendent of track and work equipment, engineering department, Houlton, Me., appointed assistant to manager of operations, Bangor, Me. Graden Swett, roadmaster, Houlton, succeeds Mr. Garcelon.

Richard B. Baldwin, coordinator of new methods, executive department, appointed also manager of purchases and stores, Derby, Me., succeeding W. A. Bamford, purchasing agent, retired. P. H. Day, assistant purchasing agent, named assistant manager of purchases and stores, Derby, and his former position abolished.

BURLINGTON.—R. L. Stevenson, commercial agent, Dallas, Tex., appointed general agent, Houston, succeeding W. L. Malone, transferred to Cleveland.

Stations Go Modern

(Continued from page 37)

gers, the building includes space for the clerical forces of the local passenger and freight departments, quarters for the trainmaster and train dispatchers, telegraph and radio offices, and lockers for trainmen. There is also space for handling baggage, storing mail en route to and from the post office, and quarters for the Railway Express Agency.

The interior finish and features exhibit the same modern motif as the exterior. Walls in the public areas are of glazed facing tile and a glass partition, set in aluminum, separates the waiting room from the lobby. Floors are terrazzo and ceilings are acoustical plaster with recessed lighting. Tickets are sold over an open counter. The structure is completely air-conditioned.

Built at a cost of about \$200,000, the new station is 221 ft long, somewhat longer than the old building. It is sandwiched in between the main tracks and Spring street, and is flanked at both ends by landscaped plots planted with flowers native to the area. It was designed by O. L. Hazelwood, Palestine architect.

CHICAGO GREAT WESTERN.—V. E. Vaughn, assistant to vice-president and general manager, appointed assistant to president.

ELGIN, JOLIET & EASTERN.—V. K. Miller appointed industrial engineer, Chicago.

B. E. Lewis appointed master mechanic, Gary, Ind., succeeding C. G. Mahoney, appointed superintendent of motive power, with jurisdiction over the Locomotive Department, Joliet, Ill.

ERIE.—Orrie M. Meyne, freight traffic manager, New York, retired March 31, because of ill health.

LEHIGH VALLEY.—E. C. Kiefer, division passenger agent, Buffalo, N.Y., retired March 31. Henry Martens, Jr., southeastern passenger agent, Philadelphia, appointed general western passenger agent, Buffalo, with jurisdiction over passenger traffic in western territory as well as Buffalo.

MILWAUKEE.—Virgil E. Glosup, assistant chief engineer, signals and communications, Chicago, appointed acting chief engineer there, to succeed W. G. Powrie, on sick leave.

H. B. Christianson, special engineer, Chicago, retired April 5.

J. E. Goggin, assistant general solicitor, Chicago, appointed general attorney there.

G. A. McCamant, assistant chief perishable inspector, appointed supervisor, refrigerator service, Milwaukee, Wis., to succeed D. S. Westover, who retires April 30.

NEW HAVEN.—A. Gerdes Kuhbach, acting financial officer, named financial officer, New Haven. William A. P. Phipps, Jr., assistant to vice-president—real estate, named director of real estate, Grand Central, New York.

NICKEL PLATE.—Frank J. Darby, assistant chief claim agent, Cleveland, appointed chief claim agent there, succeeding Fred E. Hewitt, who retired February 1. B. D. Fair, district claim agent, named assistant chief claim agent, Cleveland.

PENNSYLVANIA.—Earl W. Fisher, sales manager—Southwestern states; Ross D. Clemens, district sales manager, and William L. Wright, Jr., passenger manager, and their staffs, moved to Room 110, Union Station, St. Louis, effective April 1.

Thomas F. Schaeckel, manager of car service records, promoted to manager of freight train operations, system, Philadelphia, succeeding Arthur F. McSweeney, retired. George A. Sargent, freight trainmaster, Pittsburgh region, succeeds Mr. Schaeckel.

John W. Rathvon, freight trainmaster, New York region, appointed passenger trainmaster and supervising operator, Southwestern region, Indianapolis, succeeding C. B. Herman, named trainmaster, Pennsylvania-Reading Seashore Lines, Camden, N.J.

READING.—John B. Keating, freight agent, Trenton, N.J., appointed assistant superintendent of transportation, Philadelphia, succeeding Oscar P. Benjamin, named office manager, president's office.

RICHMOND, FREDERICKSBURG & POTOMAC.—Hunter J. Thompson, Jr., secretary to purchasing agent, Richmond, Va., appointed also associate editor of Rail-O-Gram, employee magazine.

SAVANNAH & ATLANTA.—Warner R. Wilson, assistant freight traffic manager, Savannah, appointed freight traffic manager there, succeeding George D. Sterne, retired.

SOO LINE.—R. C. Postels, division engineer, Minneapolis and Duluth division, Superior, Wis., transferred to the Minnesota division, Enderlin, N.D., succeeding E. M. Northenscald, who retired April 1. Mr. Postels' successor is B. R. Prusak, division engineer, Gladstone division, Gladstone, Mich., who in turn is replaced by A. G. Smith, transferred from the Winnipeg division, Thief River Falls, Minn. P. J. Isakson succeeds Mr. Smith.

SOUTHERN PACIFIC.—J. H. Long, assistant to general manager, San Francisco, appointed superintendent, Rio Grande division, El Paso, Tex., succeeding W. R. Adair, who retired March 31. I. O. Underhill named to succeed Mr. Long.

Frank V. Leavitt appointed general supervisor welding, San Francisco, succeeding Arthur E. Waincott, who retired March 31.

TEXAS & NEW ORLEANS.—A. M. Collins appointed assistant auditor of freight accounts, replacing J. E. Hines, who retired February 28.

Frank A. Johnson, chairman, Board of Rules Examiners, retired March 31.

Burl H. Tanner, district passenger and public relations representative, Dallas, retired March 31.

UNION PACIFIC.—R. E. Haacke, division engineer, California division, Los Angeles, transferred to the Oregon division.

William Reinhardt, vice-president (oil development), Los Angeles, retired April 1.

Calvin H. Crandall appointed agriculture agent, Portland, Ore., replacing Leo J. Wagner, resigned.

VIRGINIAN.—R. V. Bulman, assistant car accountant, appointed car accountant, Norfolk, Va., succeeding C. E. Reynolds, retired. J. A. Brown, chief clerk, succeeds Mr. Bulman.

WABASH.—R. W. Rosebrough appointed district freight agent, Chicago, succeeding J. F. Kolar, promoted (Railway Age, Apr. 1, p. 55).

WESTERN PACIFIC.—Samuel W. Fordyce, executive assistant, president's office, appointed assistant to director of industrial development.

WHARTON & NORTHERN.—William J. Desmond, traveling freight agent, named general agent, Wharton, N.J., succeeding Mahlon H. Dorman, retired.

OBITUARY

James M. Bath, 75, retired president of the New York, Susquehanna & Western, died April 3 at Chicago.

Dr. Fuller Nance, who retired in February 1951 as medical and surgical director of the Baltimore & Ohio, died April 2.

John T. Ridgely, 69, who retired in 1954 as assistant vice-president in charge of real estate and taxation, Pennsylvania, died April 2 in Balboa Heights, Panama Canal Zone.

John L. Webb, 67, who retired April 1 as system manager of freight stations and motor service of the Pennsylvania, died April 7 at his home in Merion, Pa.

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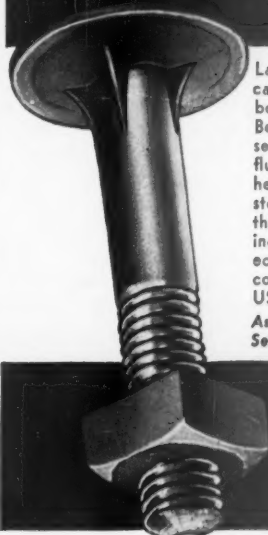
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Sault Ste. Marie Bridge
Company for the construc-
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lift bridge over the South
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Marie, Michigan. Tenders
must be delivered to the
office of the Chief Engineer
of the Soo Line Railroad,
Minneapolis, Minnesota not
later than 10 A.M., May
9th.
Plans and specifications are
on file for inspection at the
Soo Line Office in Minne-
apolis and the Corps of
Engineers Offices in Detroit
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will be furnished at a fee of
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The Critics Should Take a Rest

The railroads have stood up under a protracted barrage of criticism in recent years—most of it constructive and well-meaning; and largely from within the industry, rather than from without. Such criticism—its goal being improvement and not harm—is all to the good. It betokens life and health. No doctor takes the trouble to prescribe for a dead patient.

But there can be a surfeit of good things—even of constructive criticism. Now and then, it wouldn't hurt for the critics to ease off briefly for a look at the things about the railroads which deserve praise and emulation, rather than correction. It is the easiest kind of job to compile a list of items of recent praiseworthy progress. For example:

Things to Be Proud of

1. More systematic effort to lick the hot-box problem has been put forth in the past five years than, probably, in the entire preceding century.

2. The unprecedented revolution in motive power is now almost complete—and effective measures are being applied to bring older power up to equality in performance with the new.

3. The mechanization of roadway work, while not yet complete, has gone forward rapidly—making it possible to have first-class track with a favorable maintenance ratio, despite the meteoric rise in wages in this branch of railroad work.

4. While the problem of recurrent car shortages, and cars unsuited to shippers' needs, has not been solved—never before have so many railroad men shown the determination they now do to really get a solution to this situation. And freight cars are being improved all the time, too—more and more of them tailored to the traffic to which they are assigned.

5. The "passenger deficit" hasn't been wiped out—yet; but the outlines of an approach to this problem which promises definite results are becoming clearer all the time to more and more railroad people (see *Railway Age*, March 25, p. 52).

6. Electronic "data processing" methods now have a firm foothold on the railroads and will unquestionably move forward at an accelerated pace. Not only will greater economy in present "paper work" result, but a great deal of new information to improve service and performance is being made available.

7. Signaling and train control, electronic yard installations, communications—all are making great forward strides, toward acceleration and improved efficiency of service.

8. The heads of the railway labor organizations have, quite recently in public statements, given evidence of increasing understanding that union co-

THIS RELATES TO:

- 1—Challenging competition
- 2—Holding to high service standards
- 3—Increasing internal strength
- 4—Getting a higher level of earnings
- 5—Improving tools and methods
- 6—Seeking a friendlier environment

operation in greater railroad efficiency is definitely desirable from the standpoint of the welfare of the unionists themselves. While this constructive outlook has not been translated into modification of burdensome working rules—nevertheless, the realization of a common objective with employers is necessary first step.

Suppliers, Rates, Management

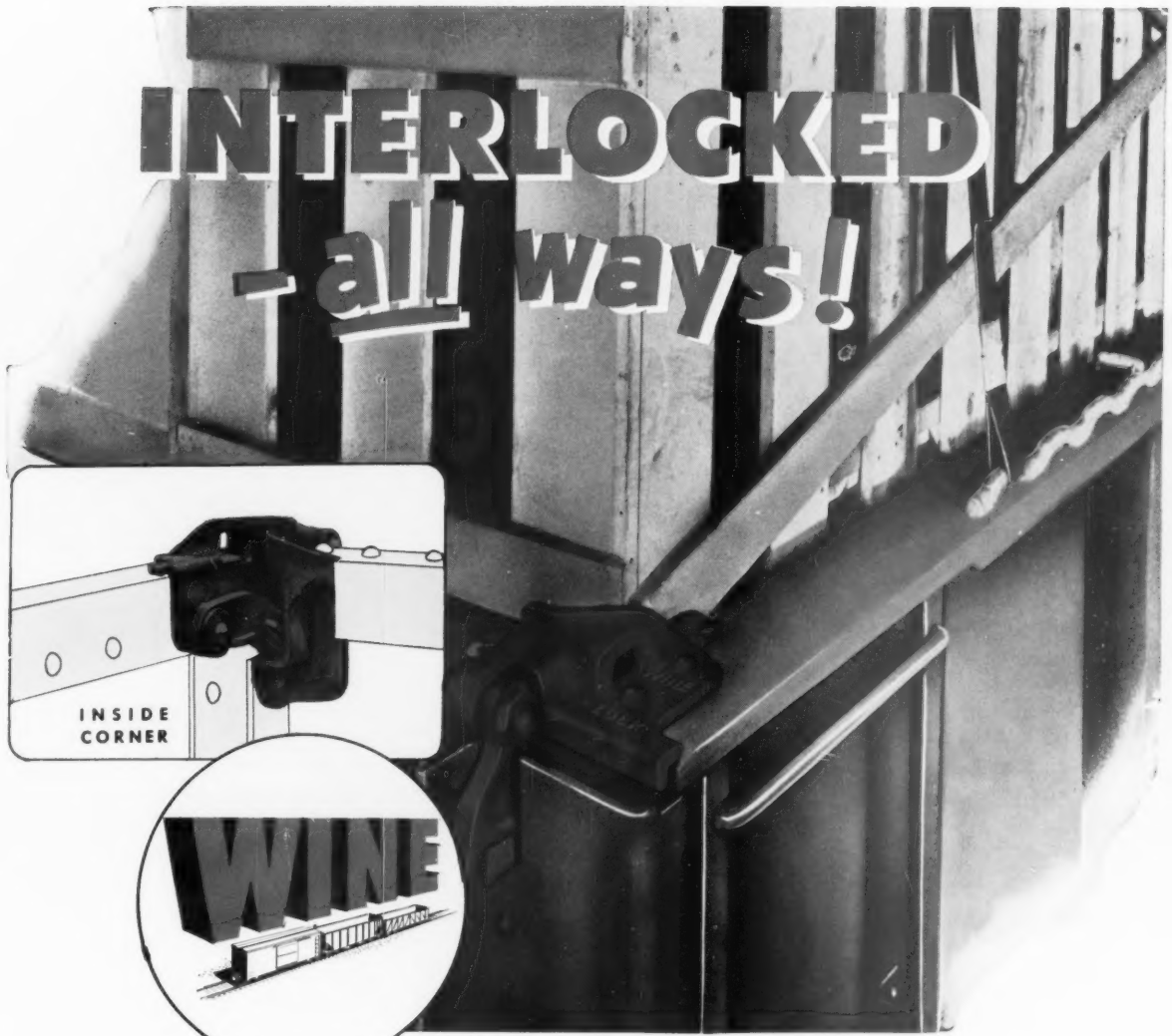
9. Railway suppliers have organized themselves into an effective trade organization, the Railway Progress Institute, for the solution of their common problems which are so closely related to those of the railroads.

10. While the complex task of readjusting the railroad rate structure to the realities of present-day competition still has a long way to go—nevertheless, a beginning is being made. This effort can scarcely fail to grow—and to produce rich fruit in due course.

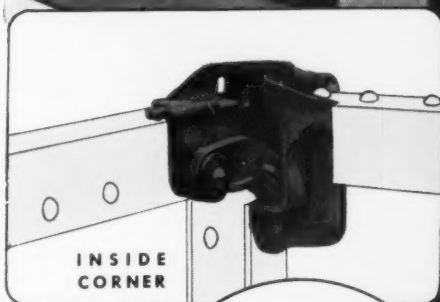
11. Never before has systematic management-recruitment and training gone forward as rapidly as it has during the past five years or so. The proportion of railroad management definitely selected and schooled to deal with its major problems goes on increasing.

This list of railroad accomplishments of the past few years could be extended much further than this. It all adds up to an exhibit which will compare favorably with the accomplishments of the management of any other industry whatsoever.

The railroad industry will continue to need its department of suggestions and criticisms, just as long as there are any major unsolved problems—which will doubtless be for quite a while yet. But the critics can be given a day off, now and then, to permit an enumeration of accomplishments. It just so happens that the record shows that the recent era of unprecedented criticism (primarily self-criticism) in the railroad industry also coincides with an era of unprecedented progress in the art and science of railroading.



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